THE
MEDICAL AND SURGICAL REPORTER

No. 1794. PHILADELPHIA, JULY 18, 1891. VOL. LXV.—No. 3.

CLINICAL LECTURE.

TUBERCULAR ADENITIS—ONYCHIA.

BY ERNEST LAPLACE, M. D.,

PROFESSOR OF PATHOLOGY AND CLINICAL SURGERY AT THE MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA—AND SUDGEON TO THE PHILADELPHIA HOSPITAL.

TUBERCULAR ADENITIS.

Gentlemen:—When we last met I brought before you a child with enlarged glands in the cervical region. At that time she was in poor condition to be operated upon, but having since had a tonic treatment, we find to-day that her temperature is lowered, her appearance is bright, and even the inflammatory condition of the glands has somewhat subsided, withal, we think we can now safely operate.

We will remove the tuberculous glands, pare the edges of the skin and approximate them so that the surface will scarcely bear a trace of the operation. Eventually the ulceration would heal up of itself, but would leave an ugly looking scar; furthermore, instead of healing in a few days, it would run two or three months and drain the system to a much greater extent than we think wise to allow. Therefore, we will operate immediately.

The glands are tubercluous and have undergone fatty, or cheesy, degeneration. The etiology and course of such affections having been made plain to the surgery of to-day, the indication to remove these glands is imperative. Here we have a tuberculous focus, in a part plentifully supplied with blood vessels. This blood traveling from the gland to other parts of the body, the lungs and brain, is bound more or less to infect the economy; not necessarily to deposit the bacilli in these parts, and cause a tuberculosis or meningitis, but being laden with poisonous materials, it is not fitted to feed the other parts of the body, so that the sooner it is removed the better will it be for the child.

You will notice, towards the deeper portion of the gland, a grayish spot, which has undergone caseous degeneration. The surrounding structures have simply grown under the influence of the tubercle bacilli. They are still alive, but it may be that in a day or two they too will have died and undergone degeneration. Therefore, we will remove the whole mass.

We find that the sterno-cleido-mastoid muscle has formed adhesions with this mass; has formed a sort of abscess wall, if you wish, from a chronic inflammation of its myolemma. Not daring any longer to use the knife, I now discard it, and, with the aid of my fingers, have exposed the internal jugular vein, pursuing the dissection further, I have come directly upon the carotid artery, the pulsations of which you can all see. Here the structures are so delicate that it is not wise to use even an ordinary curette.

Having removed all the infected glands, it is now our duty to get a surface wound that will not betray the fact that this child formerly had an ulcerative process here. The way to do this is simply to pare off the edges and approximate them carefully,, using two sets of sutures, a deep set to bear the strain caused by the tendency of the tissues to retract, and a superficial set to unite the surface and bring the edges into nice opposition.

Before closing the wound, we will inject into it a 10 per cent. solution of iodoform in ether. The ether evaporating, will leave a delicate covering of iodoform in every part of the wound.

As to a drainage tube it is not necessary in this case. The introduction of the drainage tube by Chassaignac was certainly one of the greatest steps in surgery since the time of the introduction of ligation of arteries, but you must remember *why* drainage was introduced. Its purpose was to remove foulness from the body, just as the filth is removed from our city by sewers. At that time, suppuration was looked upon

as necessary to the healing of a wound, and some means had to be provided for its removal, but to-day, knowing that we do not have suppuration if we are cleanly in our methods, it follows that we do not absolutely need the drainage tube. From the moment that we drain, we confess that we have fallen below our aim. Therefore, operating in an antiseptic way, we hope that whatever effusion takes place will be re-absorbed and will not accumulate, together with a mass of dead white blood corpuscles in the form of pus, thereby necessitating drainage.

Furthermore, in a wound like this, even if we were to use a thoroughly antiseptic drainage tube, acting as a foreign body it would of necessity irritate the parts promoting an effusion of serum, and it would be very hard for us to determine whether this effusion was natural or caused by irritation of the drainage tube. Of course if this wound were in a closed cavity, instead of in the neck, I would not run the risk of possible suppuration. Quite different would it be if we were operating in the peritoneal cavity. We would then have to put in a glass drainage tube, notwithstanding the irritation caused by it, as a small amount of pus might form and produce general peritonitis.

ONYCHIA.

The next case I wish to bring before you is one of onychia, an ingrowing toe nail. Onychia does not necessarily mean an ingrowing toe nail, but any inflammation of a nail. Apparently it is a slight affection to deal with. It is one which a physician will treat with mild methods for months, and the patient not get well. The idea of an operation for such a slight affection is revolting to the patient and even though the physician be firm in proposing an operation, if there is the slightest chance for the patient to get well in any other way, he will choose that way.

You know that a nail is simply a great amount of the same epithelium which is on the surface of the skin, all gathered into one spot, bound down by a cement substance which holds the cells together, bound together in a mass, so far away from the nourishing blood vessels that they become hardened, just as a corn becomes so hard that it begins to look like a nail. So also with the nail; it spreads from the mucous layer of malpighii about the matrix, exactly as the epithelium covering the rest of the skin spreads from that layer. But that particular layer in the matrix furnishes the epithelium born there with a chemical substance which is not found in epithelium elsewhere, a substance which gives these cells an adhesive property and binds them tightly one to the other, instead of letting them drop off one by one as they do from the skin in other parts of the body when they occupy such a remote seat from the blood vessels. That being the case, and the nail being hard, it may be considered a foreign body. If you take a piece of nail and insert it into a wound, it would act as an irritant, just as any foreign body would. So, imagine the irritation which takes place when you have a large nail, and a shoe which causes the edge of the nail to press into the skin. From the moment the skin has been destroyed by the pressure you have an ulceration and the nail pressing into wound is nothing more or less than a foreign body in the wound, and not until you remove the foreign body can you hope to cure the condition. The removal of the nail from the wound is the one object to be sought. There are several ways of reaching that end. There is a palliative way, which consists simply in depressing the skin around the nail and inserting a piece of cotton between the nail and the wound, thus removing the foreign body. In aggravated cases like this, however, not only is that measure painful, but the cotton gradually absorbs the secretions and itself becomes a foreign body, creating almost as much harm as the nail.

Again, here is a palliative treatment, which consists in putting on the toe some substance which will contract the tissues. Burnt alum is generally used for this purpose and its astringent action in contracting the blood vessels and tissues, removes the wound from the nail.

In some cases these palliative means may suffice, but in others operative treatment is necessary. There are several operations. One consists in removing the nail altogether, but this is not advisable, as it is only a small portion of the nail which does harm, and success may be gained without such disfigurement of the toe.

The best operation is that of Fehleisen, which is the removal of about one-third of the width of the nail in its whole length, including the matrix, together with the flesh beneath, removing it down to the bone. I have now done this, and place sutures, one above and one below, to draw together the edges of the wound I have made. The wound heals by first intention and in two

weeks you will not suspect that the patient had an ingrowing toe-nail.

MALIGNANT LYMPHOMA—CONSTIPATION—PERNICIOUS ANÆMIA—CHRONIC EXUDATIVE NEPHRITIS.

BY FRANCIS DELAFIELD, M. D.

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE, AT THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

MALIGNANT LYMPHOMA.

Gentlemen:—The first patient I present to you to-day, is a man 29 years of age, and a coachman by occupation. A year ago last January he noticed, for the first time, some pain at the inner aspect of the left arm and forearm, and extending to the tip of the little finger. This pain gradually began to manifest itself in all of the fingers of the left hand, together with loss of power of both the arm and forearm. In June 1890, that is about six months after the appearance of the first symptom, he noticed a swelling in the vicinity of the collar bone, and with this swelling came an exaggeration of the pain in the region of the shoulder joint. He came to this clinic at that time with a temperature of 100⅘, and an examination of his blood and urine proved negative. He was put on the use of iodide of potassium, and has been taking as much of that drug as 90 grains three times a day, but with no appreciable benfit.

As you look at this man, you can readily notice an enlargement above the clavicle on the left side, and that this enlargement is made up of separate tumors as if they were lymphatic glands. These tumors can be also felt in the back of this man's neck. On making a physical examination of his chest I find on the right side an irregular loss of resonance immediately beneath the clavicle, and I get flatness on percussion. On the left side is a tumor projecting beneath the clavicle, as well as extending above it. I get flatness on percussion on this side, with some tenderness. The breathing on the right side can still be heard, but the breathing on the left side is altogether absent. Posteriorly, I get flatness over the upper part of both lungs, with absence of breathing over the left lung, though heard to some extent over the right.

From this view of the case, as it is presented to us, it is at once apparent that this man furnishes us an example of those tumors which originate in the lymphatic glands and which run a malignant course. These tumors continue throughout their entire course to have the same structure as that of the lymphatic glands themselves, though there may be some excess of cells, or some excess of connective tissue structure present, and although they may have this apparently, harmless structure, they still exhibit all the characteristic symptoms of malignant tumors. They not only increase in size, but the muscles, fascia, and the entire surrounding soft parts become infiltrated with the new growth, as do the true sarcomata and carcinomata. It is for this reason that these tumors are known by the name of malignant lymphomata, though they are sometimes called lympho-sarcoma and lympho-adenoma.

As a rule, these tumors behave very badly. The first symptom this man had was pain by reason of the pressure on the nerves going to the left arm. That pressure has continued till he has lost power completely in the arm, and this tumor will continue to grow until it will eventually press on the air passages and the blood vessels, in such a way as to destroy the life of the individual. He has so far escaped one of the most painful conditions of this growth and that is pressure on the descending vena-cava. When the growth in the thorax presses on the descending vena-cava, there is, as a result of this condition, a venous congestion of the head which is very distressing. This man suffers comparatively little pain yet, though he is running near to the end of his course.

These tumors are of such a malignant character that a good deal of attention has been directed towards their treatment. If they were within reach of the knife the indication would point to their removal, but inasmuch as they are intrathoracic, their removal is quite impracticable. A variety of medicinal agents have been adopted for the treatment of these growths, but they have all been generally speaking without any practical benefit. The only plan that has been of any use has been the employment of arsenic hypodermatically, and kept up to the point of tolerance. Keep the patient under its toxic influence for some days and allow him to come out of it, bringing him again under the influence of this drug. There have been cases of improvement reported by this plan of treatment, but so far

as this patient is concerned, I should not suppose any plan of treatment would afford him much relief.

CONSTIPATION.

CASE 2. The next patient presents a well marked example of a rather numerous class of patients who have disturbances of sensation, without any organic lesion. This condition is more common in women than it is in men, though occasionally occurring in the latter.

The patient I now show you is a woman 45 years of age, who has suffered from an acute brochitis about a year and a half ago. And since that time has experienced a feeling of general malaise. She does not feel as strong as formerly and has lost some flesh and strength. She also complains of a feeling of pain referable to the right hypochondriac region and is troubled with constipation. She has no physical signs about the chest or abdomen, and is evidently suffering from no organic lesion.

You will find in practice, patients present themselves to you for treatment, who have disturbances of sensation, as this woman has, but with no organic or even functional disease. I have seen a great many cases of this character who date the beginning of their abnormal sensations from the attack of influenza, which has been epidemic here, and this particular affection seems to have brought out this disposition in patients in whom it has not been observed before. It does not follow that because these patients present no pathological lesion, they do not suffer. There is something the matter with them from their point of view, and it is always a question as to the particular way in which it is best to manage these patient while under your observation. It is always of great advantage in the treatment of these patients if you can find something wrong about them that you can regulate and correct. As you correct this condition, these patients gradually get better until finally the disturbance of sensation gradually passes away. In this woman the only thing that seems to be particularly wrong with her is her constipation, and with this constipation is a certain amount of flatulence. Her physician tells me that her bowels are easily moved by laxatives, so for that reason we will give her one of the least energetic of the laxative medicines and the one, at the same time, especially suited for her case. We will, therefore, recommend her to take every night on going to bed from eight to ten grains of asafœtida in capsules. This will help her to sleep, will act as a laxative, cure her disposition to flatulence, and, at the same time, exert a certain sedative effect on her general nervous system. In addition to this she should be warned against the use of tea or coffee, and should not be allowed to eat indigestible food, confining herself to the use of simple and nutritious elements of food. She should also be encouraged, despite her feeling of weakness and general malaise, to go out of doors and take moderate exercise daily in the open air. There is a still further advantage in the treatment of these cases in not paying more attention than you have to the particular disturbance of sensation of the patient. By managing this class of cases in this way you will find they will do very well indeed and you may in time rid them altogether of these disturbances of sensation which distressed them so much.

PERNICIOUS ANÆMIA.

The next patient I show you presents all the pathological symptoms typically characteristic of the form of disease from which she is suffering. She is a woman 46 years of age, and complains of irregular menstruation, headache, œdema of the feet and shortness of breath. Her temperature to-day is 100° F. and a week ago was 99⅘° F. She has a systolic murmur at the apex, and her urine has a specific gravity of 1,010, but contains no albumen. An examination of her blood shows diminution in red blood cells and hemoglobin.

This trouble began in this case about a year ago, as she states, but it is very likely it has lasted for a longer period and reached its development at this time. If you look at this woman you can readily notice that expression of languor and feebleness, as well as an extreme palor of the skin and mucous membrane. She is already far advanced in the disease, though there is no reason why she should not improve for a time. You can have no difficulty at arriving at a diagnosis of pernicious anæmia in this woman's case.

The treatment of this woman resolves itself into the use of proper food and medicine. Her diet should consist largely of milk, and she would do better in bed than going about. The medicines best suited for her case would be the use of iron and arsenic. Iron alone is not of as much service to this class of patients as it is in simple anæmia; nor does arsenic alone answer very well. The combination of iron and arsenic is the most efficient treatment, and of these they have to take considerable quantities. The best way to give iron is in the form of Blaud's pills, and

the best form of arsenic is the arsenious acid. I should commence treatment in this case with $\frac{1}{10}$ of a grain of arsenious acid and two Blaud's pills three times a day after meals. Then I would gradually run these up till she was able to take $\frac{1}{5}$ of a grain of arsenious acid and twelve Blaud's pills three times a day. As regards the iron there is no trouble experienced on the part of the patient in running it up, but in the use of the arsenic, of course, she will have to be watched, for the first evidence of arsenical poisoning, œdema of the eye-lids, pains in the stomach, vomiting, etc., and the moment you find you are giving too much arsenic, then diminish the dose to the point of tolerance. By these means it is possible for this woman to improve considerably for a time. The more you see of these cases of pernicious anæmia, the more you will recognize the fact that they are bad cases to treat. Some of them do not improve under treatment, while others that look bad when they apply for treatment, improve a good deal and they begin to think they are well. They lose their bad color, and their shortness of breath, their appetite again comes back and they are able to work and attend to their daily avocations as usual, but they have to take some iron for a very large part of the time to keep them from running down and relapsing into their former condition.

CHRONIC EXUDATIVE NEPHRITIS.

The next patient presents certain clinical characteristics somewhat similar to the woman you have just seen. She had, as you saw, an extreme palor of the countenance, and that palor, I told you, was characteristic of essential anæmia. This man's face is almost as pale, his lips, you will notice, are exceedingly anæmic, and yet although the palor in both cases is almost the same, you would expect to find in the case of this man some organic lesion to account for his trouble. This man's urine contains large quantities of albumen, his pulse is rapid and full, but without increased tension, the pulsation at the large arteries of the neck is considerably exaggerated, and his heart is increased in size, the apex being further to the left than it should be. He has also a double aortic murmur and his abdomen is somewhat distended.

We have then a man 37 years of age who tells us he was in ordinary health up to a period of about ten months ago. He took at that time, he states, medicine for the expulsion of a tapeworm, and has been sick ever since. Neither the medicine, nor the tapeworm, has had anything to do with his present condition. During these ten months he has been suffering from dyspnœa which keeps him from lying down comfortably at night, and he has to sleep propped up with pillows. He has not had much of a headache till lately, but he has a neuro-retinitis and some swelling of the feet and ankle joints. He does not notice any change in the quantity of urine passed, although he says that it is sometimes higher in color than at other times.

When you look at this man you notice the anæmia to which I have already referred, and though this anæmia shows itself very plainly in his face and mucous membrane, we would not find the same diminution in the hemiglobin and the number of red blood globules as in the case of the patient with essential anæmia. This patient, then, illustrates a straightforward case of one suffering from chronic endarteritis affecting the aortic valve and a nephritis, of an exudative type, which you can call either chronic or subacute, but which, judging from the specific gravity of the urine, has already affected the structure of the kidney to a very considerable extent. These are the two important lesions from which this man is suffering and he presents an exceedingly unfavorable example of a patient of this class. He is a man, judging from his present condition, whom you might expect to get worse and very rapidly too, and the way in which he seems likely to get worse rapidly is in the further development of dropsy, in the continuance of the anæmia, and the progressive loss of flesh and strength.

Now as to the best way of managing this patient. This man is a great deal too sick to be up and about. He ought, therefore, to be in bed or in a reclining chair at home. The trouble about keeping these men in bed is that they cannot lie down with comfort. His food for the present should be confined exclusively to the use of milk, and bye and bye we might add some solid food to this. Then when you try to get any further than this treatment with this class of patients, viz: rest and milk diet, you will find it difficult to get hold of anything that will benefit them to any great extent. His anæmic condition we may try to help by iron and inhalations of oxygen, and we may be able to get rid of the dropsy by the use of purgatives, by sweating and by diuretics. On the other hand, you may find none of these things will be of any use, and that the dropsy instead of improving, will get worse.

Then as regards the character of his cir-

culation. There is nothing there calling for interference, for though the heart is diseased, it is doing its work fairly well. The inflammation that is going on in the kidneys is an inflammation of some activity and one that we feel we ought to do something for, but yet it is a condition very difficult indeed to control. In such a case as this it is possible that sweating the patient may help the nephritis. Hot air baths may be of some service in this direction, though counter-irritation, hot applications, or cups over the lumbar region are not apparently of any use in in this class of cases.

As to the use of drugs in this condition we are very much in doubt. In some of these patients opium seems to be followed by improvement, while others with the same pathological condition are dangerously poisoned by small doses of this drug. I recently saw an old lady with nephritis in whom a single dose of an eighth of a grain of morphia came near destroying her life. Then of the other drugs which we use for this condition most frequently are the iodide of potassium and the bichloride of mercury. Sometimes, we use them separately, and sometimes in combination. As a rule we get better results from the use of these drugs in combination than otherwise. It is not necessary to use them in very large doses. One-thirty-second of a grain of the bichloride and from five to ten grains of the iodide of potassium three or four times a day will be sufficient.

When speaking thus discouragingly of this class of patients, I have in my mind those cases that when you first see them are just as bad physically as this man is. When you come across a case like this, with so bad clinical features as this man presents and with such a short history of getting steadily worse, you know very well that whatever you do in the way of treatment will not prove very satisfactory to you or your patient.

COMMUNICATIONS.

CONDITIONS FOLLOWING PARTURITION REQUIRING ABDOMINAL SECTION.[1]

BY E. E. MONTGOMERY.

PHILADELPHIA.

The developments of abdominal surgery, in the last twenty-five years have, in many directions, revolutionized the practice of both medicine and surgery. The field of surgery under its influence has been widely extended. Operative procedures that would have been thought homocidal, for diseased conditions, that were then believed to be beyond relief, are now daily practiced and recognized as correct and scientific methods of treatment. While medicine and surgery have been so ready to accept the aid afforded by the abdominal surgeon, but little, until very recently, has been done in the field of obstetrics. It is true that the earliest abdominal operation was probably for the relief of the woman who could not otherwise deliver herself, but beyond this, there had been but slight interference with the knife with ordinary processes. The similarity of inflammatory processes following parturition to those of ordinary surgical infectious diseases had been early recognized, but it has been only recently that the methods of procedure which would be considered as proper in surgery, have been instituted in obstetrics. Women have been permitted to die from puerperal peritonitis or puerperal metritis, with large collections of pus in the pelvis, abdomen, or walls of the uterus without the obstetrician apparently being able to appreciate the surgical maxim "Ubi pus, ibi evacua."

As a resident physician in the Phila. Hospital I remember a number of cases in which these septic cases following parturition were permitted to die and subsequent autopsy disclosed large pus collections,—collections which could have been readily washed out and the cavities drained without increasing the danger to the patients,—indeed the danger would have been very greatly lessened.

In late years the importance of decreasing the opportunity for the entrance and multiplication of septic germs has been very generally recognized. With this in view we find the freguent use of vaginal and intra-uterine antiseptic injections. While it is recognized that these injections are not desirable in non-septic cases, there are but few obstetricians of the present day who do not practice them where there is indication of sepsis. The necessarily infrequent use of injections, even in those cases receiving the best of care, the inability to bring the antiseptic material sufficiently in contact with the entire mucous surface to destroy the multiplying germs and render the surface sterile, have led to the institution of plans of procedure by which the decomposing material, affording origin and nutrition to

[1]Read before the Pennsylvania State Medical Society, June 4th, 1891.

these organisms, should be itself removed. To this end late writers upon obstetrics, almost without exception, highly recommend the use of the curette in every case of evident sepsis. By it the decomposing material is thoroughly removed, the cavity subsequently irrigated, and rendered practically sterile. This procedure has been effective in greatly reducing the mortality of such cases, but there are many cases in which the diseased conditions have extended beyond the uterine mucosa, before the obstetrician has had an opportunity to institute measures to limit its action. In such cases the disease may be in the form of peritonitis, metritis, salpingitis, or ovaritis.

In a case of septic trouble following parturition, when the uterine cavity has been curetted, and subsequently irrigated with reduction of the temperature or amelioration of the other unpleasant symptoms, or in cases where physical examination determines the presence of inflammatory exudation about the uterus, in the broad ligaments, or the uterine surfaces, shall we sit tamely by and devote ourselves simply to the administration of remedies which at best can have but a remote influence, and permit the life of a patient to be sacrificed? Such cases are just as amenable to treatment by proper surgical procedure as are those in which inflammatory pelvic trouble arises from other causes and at other periods. That this has been recognized, is evident from the increasing number of cases found in the literature of the day, where women have been subjected to abdominal operations following parturition,—cases attended with the most gratifying results.

It is my purpose to consider to-day, some of the conditions that may render abdominal operation not only justifiable but absolutely necessary, in order to save the life of the patient; and would promise by saying in any cases in which there is a development of septic symptoms following parturition, the obstetrician should be on the alert to discover the avenue through which the poison has entered the system and prepare to have measures instituted to bring about its arrest.

Small Ovarian Tumors.—The presence of small ovarian tumors, frequently of a dermoid character, occur sufficiently often in women who have given birth to children, to lead to the consideration of their possible presence and injury in the process of parturition, and are worthy of our attention. A number of cases have been reported of death from septic conditions following parturition where subsequent autopsy has disclosed that small growths of this character have been situated in the pelvis, have undergone rupture or bruising by the head of the child, and have consequently led to the subsequent fatal symptoms with the advent of the septic condition. Were such patients subjected to abdominal section, the diseased mass removed, the abdominal cavity irrigated and possibly drained, an entirely different termination would have been the result.

Tubal Disease.—The presence of pus collections in one or the other tube does not necessarily interfere with conception and subsequent pregnancy. The presence of such a collection, however, is a source of the greatest danger to the patient during the following parturition.

H. J. Boldt, in Proceedings of the Obstetrical Society, 1888, page 59, reports the case of a woman twenty-two years of age, who had been married five years, she had had three children, the last child born four weeks before she came under his observation. The labor was long, followed two hours subsequently by high temperature and profuse sweating, temperature varied from 102 to 105, with constant pain over the lower portion of the abdomen. The uterus was large and flabby; on either side a large, fluctuating, movable mass, which was supposed to be a distended fallopian tube. The case was diagnosed to be one of septic salpingitis and was strengthened by the facies of the patient. She died in collapse a few hours subsequent to abdominal section. In the operation there was great difficulty on account of adhesions. On the right side the tumor preved to be a distended fallopian tube, which ruptured during the separation of the adhesions, discharging its contents into the abdomen. On the left side the tumor was an encapsulated intra-peritoneal abscess, which also burst during the operation. The Fallopian tube was not abnormal, ovary very intimately connected by adhesions to the uterus, so that its removal would have been impossible without injury to the uterus itself. At the autopsy, an abscess was found in the substance of the muscular structure of the uterine wall, which contained about two drachms of pus. The cavity of the uterus measured about three and a half inches.

Large Fibroids.—The presence of large fibroid tumors in the walls of the uterus of a paturient woman is always a source of danger. In such cases the uterine sinuses about the tumors are quite large; the presence of the growth interferes with the proper contraction of the uterine muscular fibre, so that

the avenues for the entrance of septic material are rather increased. In my experience in the Philadelphia Hospital, I saw two cases of this character, in which the presence of a tumor was the cause of the development of septic trouble, leading to the termination of the lives of the patients. The development of sepsis in such cases should direct the mind of the obstetrician to the importance of at once removing the cause of the development of the trouble; delay is attended with danger.

Retention of Placenta.—The incomplete removal from the uterus of the placenta, membranes, or clots, is a prolific source for the development of sepsis during the subsequent convalescence. It is needless to urge upon members of this society the importance of thoroughly emptying the uterus of fœtal vestiges or envelopes, and the securing of firm contractions of the organ, with its cavity free from clots, but it is an unfortunate fact that neglect of these precautions frequently results in the development of sepsis. In any such case the first indication would be, of course, the thorough clearing out of the cavity of the uterus by means of the curette or finger—which is, perhaps, the best curette—and the subsequent irrigation of the uterine canal with a disinfectant solution. This method of treatment will, in many cases, be sufficient to bring the disease to a happy termination, but in cases where the presence of foreign material has not been recognized sufficiently early, we may find that the infection is no longer confined to the cavity of the uterus but has travelled into the tubes or through lymphatics or uterine sinuses, has involved the uterine walls and peri-uterine tissues. When a patient suffering from sepsis following parturition comes under observation, we should carefully examine to determine, if possible the existence of inflammatory trouble about the uterus, and where it is found, should not only resort to thorough emptying of the cavity of the uterus, but also to the removal of the inflammatory collection. The importance of this will be well illustrated by the history of the following patient: A woman about thirty-five years of age, who had had two or three children, and had gained quite a reputation by the successful performance of abortion upon herself, was seen in consultation with my friend Dr. Nock, March 6, of the present year. The woman had accomplished the discharge of the fœtus in a two and one-half months pregnancy, by the use of the handle of a tooth-brush, a week before. This was followed by chills, elevation of temperature, pain and tenderness over the abomen, and an offensive discharge. I was called with a view to advise as to the wisdom of dilating the uterus and removing the evidently decomposing placenta. Upon examination of the patient a mass of exudation and a sensation of fluctuation was felt posterior to the uterus, pushing the uterus well forward. I urged the importance of not only dilating the uterus and removing its contents, but of opening the abdomen and securing the thorough evacuation of the pus contents of the pelvis. The afternoon of the same day the patient was placed under the influence of an anæsthetic, the vagina thoroughly irrigated, the uterus dilated, and the offensive decomposing mass removed, the uterine cavity thoroughly irrigated with an acid sublimate solution, 1 to 2,000, and the abdomen then opened and a pint of pus evacuated from the pelvis. Both ovaries and tubes were removed, the abdomen thoroughly irrigated aud a drainage tube inserted. This patient recovered without an unpleasant symptom. Had either procedure been neglected, it would have resulted in the death of the patient.

In cases in which there is no apparent infiltration or extension of the disease to the surrounding structures, we may be content temporarily, with the curetting and disinfection of the cavity of the uterus, but should this treatment not be followed by subsidence of the symptoms of sepsis, thorough examination should be made, and even when failing to find evidence of intra-abdominal trouble, an exploratory incision should be made to make certain the presence or absence of such extension.

The writer has recently had an apportunity of saving a patient by this procedure, who would otherwise have died from septic accumulation which was not apparent by superficial examination.

The case of a young woman seen in consultation with my friend Dr. H. G. McCormick, of Williamsport, Pa. She had been confined Feb. 6th, in a very easy labor. On the 8th the temperature arose to 103, this subsequently subsided, but remained above normal, and on the 13th, it reached 106⅘, when I was called to see her. I examined the patient carefully, palpating the abdomen but found nothing within the peritoneal cavity to indicate a cause for the serious symptoms. The patient was placed under an anæsthetic and the finger introduced into the cavity of the uterus and this organ thoroughly dilated, when there arose at once an extremely disagreeable odor, this was found to be due to acute endometritis with decomposing decidua.

The cavity of the uterus was thoroughly curetted with the finger and with the instrument, subsequently irrigated and an iodoform gauze drain introduced up to the fundus. The drain was removed at the end of forty-eight hours. The temperature subsided in a few days to normal, at which it remained for some fifty-four hours, when it again began gradually to rise, remaining for some days at 100 to 101, once going up to 103. On the 8th of March, twenty-three days after the curretting her temperature again reached 106⅖, and I was summoned to see her. I again palpated carefully the abdomen to determine whether there was any extension of inflammatory trouble from the uterus. I found no involvement of the tubes of broad ligaments, uterus freely movable, no fixation of either uterus, tubes or ovaries. I again dilated the cavity of the uterus with the finger and explored the entire cavity or internal surface of the uterus, to determine, if possible any collection of pus within its walls. There was an indication on the right side of there having been loss of tissue of the uterine cavity by the probable formation of an abscess, this was still further confirmed by the history of pus having been discharged from the uterus within the previous three weeks. A hard rubber drainage tube was inserted into the cavity of the uterus with the hope that it would promote drainage still further, and that the elevation of temperature would subside. The temperature was reduced under the influence of large doses of acetanlide, but there would be chilly stages occurring about every five or six hours, followed by an exaggerated temperature. On the morning of the 10th, I again returned in answer to a summons, determined to open the abdomen, with a view of ascertaining whether there was any obscure cause for the septic symptoms. The abdomen was opened, in this I was assisted by Drs. H. G. McCormick, Nutt, and Conley, of Williamsport, Pa., and Dr. T. B. Early of Philadelphia. The right ovary and tube were raised up, without finding any disease in the tube, the ovary was probably twice its normal size, apparently cystic. The left ovary and tube were then raised up, the tube showing in its abdominal end a small piece of lymph, the ovary upon its anterior surface showed also a piece of adherant lymph, the ovary was four times its normal size and was also apparently cystic. The condition did not offer what I thought sufficient cause for the serious condition of the patient. I then carefully went around the entire surface of the uterus to determine the presence of any pus collections within its walls, examined carefully the broad ligament but with a negative result. At a loss for something better to do, I ligated the pedicles, removed the ovaries and tubes, washed out the abdomen, closed the wound and replaced the patient in bed. The operation had been begun with the patient in a chill, and with a temperature of 104⅘. The ovaries were examined, the right presenting nothing more than a serious collection without any well established cysts. Opening the left ovary, a teaspoonful of thick greenish, offensive pus was disclosed, and this we concluded to have been the cause of the profound symptoms, from which the patient had lately suffered. Her subsequent convalescence was normal, temperature subsiding and reaching normal within two days. She is now in excellent health, and is nursing her child. The milk supply having been lost for a time during the most profound symptoms.

Another case illustrating the importance and absolute necessity of abdominal section, was one seen in consultation with Dr. Hollopeter. The patient was a woman, 26 years of age, who had been confined the latter part of the last year, and owing to the fact that she was living in an adjoining room to her husband who was dying with phthisis, her physician was particularly careful in the exercise of antiseptic precautions, both during parturition and its subsequent convalescence. She did well until the end of the second week, when there was an elevation of temperature which continued at 102 to 105. She had profuse night sweats, became very greatly emaciated, suffered from continuous pain in the pelvis, a frequent desire to void her urine, and a steady decline in strength. Upon examination a mass of exudation was found apparently in front of the uterus, pressing upon the bladder, which gave the sensation of the presence of fluid. The operation was done, both ovaries were found to form abscess cavities the size of small oranges. The omentum was glued down to the tissues in front of the uterus, and it was with considerable difficulty that it could be separated, as it was folded up into a large inflammatory mass. It was ligated and this portion removed. The evening following the operation the patient had a temperature of 103, this lasted, however, but two hours, after which it subsided and did not subsequently reach 101. The patient rapidly increased in strength and appetite, with a discontinuance of sweating, and, at present, is in the enjoyment of excellent health.

To these cases I might add a number of

others illustrating the importance of abdominal section for diseased tubes and ovaries, which have given rise to profound septic symptoms following parturition. There are other cases in which the ovaries and tubes appear apparently healthy, but in which there has been an absorption of septic material from the uterine mucosa, giving rise to abscesses in the walls of the uterus.

During my term of service as a resident physician in the Philadelphia Hospital, I remember having seen a woman who had had an attack of puerperal metritis, from which she was apparently convalescing, her temperature, however, varied from 99 to 101, and her pulse continued rapid. She had been about, able to sit up part of the day, when she was suddenly taken with symptoms of collapse and died at the end of twenty-four hours. At the autopsy it was found that the fundus of the uterus had been the seat of an abscess or of multiple abscesses, from which it had entirely sloughed off, leaving the fundus open, giving the remainder of the uterus the appearance of a funnel.

In cases of abscesses in the uterine walls a late writer has advocated supra-vaginal hysterectomy; as the cervix forming the stump in such cases would be exceedingly short and difficult to bring up into angle of the wound, it has seemed to me that it would be a more preferable procedure to extirpate the uterus. This may be done through the vagina, or by Kraske's method, behind the anus, by enucleating the coccyx and resecting the sacrum, or by the abdominal method. Of the three different procedures, the vaginal or the Kraske method would be preferable.

In what I have said in advocacy of abdominal operations following parturition, I would not have it understood that I urge such procedures in every case of sepsis, on the contrary, I would urge first, that the patient should be subjected to a careful and thorough examination to determine the avenues by which the poison is entering the system, and ascertain measures to arrest its further progress.

Thus, in September of the past year, I saw in consultation with three other physicians, a case in which the question of abdominal incision had been considered and I was asked to decide as to its wisdom or necessity. The patient was very sensitive, had undergone an exceedingly difficult labor, and was at the time, suffering with a temperature of 103. I suggested that as it would be necessary to place the patient under the influence of an anesthetic to determine accurately the condition of the abdominal cavity, it would be better to make preparation for an abdominal operation should the examination disclose its necessity. The patient was etherized, when the examination disclosed that laceration had taken place through the peritoneum into the rectal septum, and a profuse offensive lochia was being discharged. Introducing the finger into the vagina it was found that the vaginal walls were lacerated laterally to the tuberosities of the ischia, and upon the left side the laceration had extended into the broad ligament, so that the finger could be projected against the peritoneum. With such an extensive laceration of the tissues, affording a large surface for the absorbtion of septic material, I at once concluded—in which conclusion my colleagues concurred—that there was here sufficient cause for the phenomena present, and the symptoms of abdominal complications were negative, consequently no incision was required. The sutures were removed from the perineum, the cavity of the vagina and uterus thoroughly washed out and the wound treated as an open one, by frequent irrigation. The temperature subsided, but two days following ran up to 106. She was at once placed upon a blanket and wrapped in a sheet wrung out of ice water, bathed in ice water, and acetanalide gr. x, given every hour until she had had three doses. Her temperature that evening was 100, the following day 99, and never rose above 100 during her subsequent convalescence.

In cases of sepsis, then, we would advise the following method of treatment.

1. Careful examination as to the avenues of entrance of septic material, and prompt measures to secure its elimination.

2. Where there is no vaginal or vulvar laceration to afford an entrance, the dilatations of the uterus and the thorough curetting of its cavity, followed by intra-uterine irrigation.

3. Where the presence of septic absorption has led to evident accumulation within the pelvis, or to the presence of fluctuating masses therein; prompt opening of the abdominal cavity, with the removal of the diseased organs, irrigation of the cavity and drainage.

4. Where no cause for septic disease is found in the pelvis, where curetting and irrigation of the uterus has had no influence upon the progress of the disease, an exploratory incision should be made to determine whether there are not small pus collections within the internal organs, serving as centers for the distribution of the poison. If the ovaries are somewhat enlarged without

giving rise to other symptoms to indicate the presence of pus within them, it should be determined if necessary, by puncture. In the healthy organ, puncture with an aseptic knife or needle will not injure it. If it contains pus as in our patient, such a plan would lead to its disclosure.

5. Where the uterine walls are the seat of abscesses, the uterus itself should be removed.

6. Where fibroid tumors within the walls of the uterus are associated with septic symptoms, operation should be done promptly and these growths with the fundus of the uterus removed.

7. If there has been any reason to suspect the presence of small dermoid or other ovarian cysts, and their injury during parturition, abdominal operation is urgently indicated, and where they have not been suspected and are the cause of the septic symptoms the course of procedure directed in this paper, would lead to their disclosure and removal.

CANCER OF THE PANCREAS.

BY J. L. MASTERS, M. D.,

PADDY'S RUN, OHIO.

I desire to report two cases of primary cancer of the pancreas, which it has been my privilege to see.

I was first called to see T. W. aged 43, May 7, 1888. He was tall, sparely built, and a farmer by occupation. He went on an occasional drinking spree. Nothing of interest in the family history.

He had had pneumonia, pleurisy and intermittent fever a number of years before. He had been kicked in the abdomen by a horse, but the injury had never given him any trouble.

When I first saw him he had what I thought to be remittent fever. He had elevated temperature and a rapid pulse following a chill, an acute headache, bilious vomiting, constipation, coated tongue and general malaise. The symptoms continued eight days under the influence of a calomel purge followed by quinine.

In ten days the symptoms returned followed by same treatment with cessation of symptoms in six days.

At the time of the second attack he told me he had been losing flesh rapidly, became easily tired, had palpitation of the heart, grew short of breath and had a great deal of pain in the top of his head.

I examined him very carefully at this time in a vain search for something upon which to base a diagnosis.

He remained under my care until Oct. 27, when he sought other advice. He passed into the hands of two different physicians before I again treated him, one doctor stating that he had consumption and the other attributing his trouble to the liver.

Feb. 2, 1889, I saw him again at which time he was complaining of pain over the spleen. His respirations were rapid, pulse, 110, temperature 101°. The abdomen was tympanitic and greatly distended. Bowels constipated; some frontal headache. The spleen was much enlarged, extending down to within two inches of the symphysis pubis and one inch to the right of the umbilicus. It was very firm and not tender. This enlargement had all taken place in four months, between Oct. 27th and Feb. 2nd, of the following year.

Another careful examination failed to discover any lesion except the enlarged spleen.

The skin was sallow or earthy. Jaundice was never present. The fever was intermittent at first but became remittent; the intermissions occurring in the morning. Sometime between Oct. and Feb. he commenced coughing, the cough being of an irritable kind with little or no expectoration.

Examination of the lungs negative. At times the skin was bathed in sweat.

The appetite continued good most of the time until the last two months, when he complained of getting tired of everything so soon. There was no dislike for any special article of food; but he vomited every time after taking cod liver oil which I tried to give him.

Nausea and vomiting were early symptoms, coming on usually with a coughing spell. He vomited only four times within the last six months.

One of the very disagreeable symptoms of which he complained was an intensely salty taste always present in the mouth.

Pyrosis, acid eructations and burning in the stomach were annoying symptoms. Bowels constipated and stools dark colored throughout the illness.

The urine was abundant, high colored and deposited a milky sediment. Examination never showed the presence of anything but the phosphates, but I have since wondered if there was not some fat present. The countenance was always anxious and pinched.

When in the upright position he had more pain and leaned forward to relax the abdominal muscles. The last few months

the tongue was clean. The pulse was weak and thready from 100 to 120. Temperature 100° to 103½°.

Pain was never a distressing symptom, often being entirely absent for days. When present it was always referred to the region of the spleen or liver. It was never lancinating but often dull and heavy. A tumor was never made out on account of the extreme abdominal distension and enlarged spleen.

Emaciation was progressive and he died April 15, 1890, a little more than eleven months after I first saw him. Death was due to exhaustion, the immediate cause being œdema of the lungs and hydrothorax, commencing about four days before death.

Diagnosis leucothythæmia. Treatment was symptomatic and supportive.

Autopsy 24 hours after death, Drs. Hoover, Hancock, Scott and Butterfield being present.

Rigor mortis well marked. Body greatly emaciated. Abdomen greatly distended. Heart very small and pale. Blood vessels stood out prominently on the surface (of heart). Pericardium full of fluid. Left lung completely adherent to chest wall and œdematous.

Right lung œdematous, partly adherent, non-adherent space filled with fluid. On the anterior surface of the middle lobe of the right lung was a small nodule, firm, reddish-brown, and the size of a cherry. In the abdominal cavity was about two pints of fluid. Intestines distended with gas, otherwise normal. The spleen was very much enlarged being about 10 in. by 8 in. by 5 in. It was very hard and a reddish blue in color.

The liver was slightly enlarged. A mass the shape of an egg was found on the anterior surface of the right lobe the size of a hulled walnut. The mucous coat of the stomach was injected. The duodenum and kidneys were normal.

The head of the pancreas was a nodular tumor with a rounded outline, composed of nodules varying in size from a pea to a small hickory nut. The tumor was about 2½ by 3 inches in diameter. The remainder of the pancreas was normal.

The lumbar glands were much enlarged, and some were nodular. They varied in size from ½ to 1½ inches in diameter. Microscopical examination was not obtained, because the specimen was permitted to spoil by the pathologist before an examination was made.

The opinion of all present was that the disease was primary cancer of the pancreas.

Case 2, occurred in Dr. Hoover's practice, of Ross, O., and to him I am indebted for notes on the case and the privilege of visiting the case and of attending and holding the autopsy.

Case 2. Mr. C. W. æt. 65, widower, occupation farmer. Among his children is an imbecile daughter and a son with tuberculous hip joint disease. His wife's death preceded his two or three years, she having died of cancer of the breast. Had never had any severe illness, nor had he ever received an injury.

The onset of his troubles was some digestive trouble in Jan. or Feb. 1890 with general malaise and loss of flesh. The loss of flesh was rapid and continuous, the whole amount lost being about 50 pounds.

There was more or less dull pain in the epigastrium, radiating to the thorax, the loin or the umbilical region. It was never severe enough to call for an anodyne except once or twice. The pain was not increased by motion or erect posture. He was free from pain the last month.

The qantity of urine was about normal, brownish yellow, staining the chamber an orange color. The sp. gr. 1028. It showed the presence of bile under the tinct. iodine test. It was not examined for fat.

The bowels were obstinately constipated. The stools were at first hard but later were soft. They were of an ashy color.

The skin was dry and very much jaundiced, being of a deep yellow. It (the jaundice) appeared five or six weeks before death and persisted.

The expression was not unnatural, the temperature about normal; pulse good and 76 to 90. He had pyrosis, acid eructations and burning in the stomach after meals.

The appetite was fair but capricious, there also being many things he could not eat.

He had occasional nausæ but never vomited. He had hiccough a few times.

Physical examination revealed a tumor in the epigastric region, firm and not painful to gentle pressure. On percussion it gave a dull note; on auscultation there was a distinct bruit. On palpation, pulsation was plainly felt, suggesting the possibility of the growth being an aneurism.

Through the kindness of Dr. H., I was permitted to see Mr. W. about Oct. 1, and was asked for a diagnosis. At a future date I gave it as my opinion that he had cancer of the pancreas. He died Oct. 27, after an illness of about 10 months.

An autopsy held 20 hours after death. The body was much emaciated, skin a deep yellow. A tumor plainly visible in the

epigastric region. Upon examining the abdominal contents it was found that the head of the pancreas was a somewhat flattened oval tumor 2½ in. diameter by 1½ in. thick of a yellowish red color. It was very firm and resisting. In the liver were numerous fatty patches. The borders of the liver were rounded but the size was about normal. The common duct was obstructed by compression, but I could easily pass a probe through it when the pressure was removed.

The duodenum was congested. There were neither adhesions nor peritonitis. The stomach was apparently healthy. Sections were examined microscopically and the pathologist pronounced the disease schirrus of the pancreas.

After looking over the clinical history of these two cases one could scarcely conclude they were the same disease had not an autopsy been held in each case and the pathological condition found to be the same. It is true the first case lacks the positive evidence of a microscopical examination, but microscopical examination placed it with the second case.

In the first place the spleen was enormously enlarged. This was due I think to the pressure from the tumor in the head of the pancreas upon the splenic vein, producing a long continued hyperæmia and consequent growth in the spleen. In case two the spleen was of natural size.

The first case was attended by fever. In case two there was none. The fever must have been due to either the local peritonitis about the tumor or was of a septic nature. Some of the nodules were breaking down in the center, and it is possible that the absorbents took up a certain amount of septic matter and produced septic fever.

In one case there was a cough, in the other none. The cough may have been produced by pressure on the cœliac plexus, initiating the pneumogastric and producing a reflex cough.

I cannot explain the abdominal distention unless it was due to fermentation from the want of the action of the pancreatic fluid upon the ailment.

These cases both occurred in males over forty years of age. They were both very difficult to diagnose, for among other reasons it was not thought the pancreas was apt to be the source of trouble. I am led to believe that pancreatic troubles are more common than we suspect. Within the last three years these two cases have come under my notice.

Out of 11,492 autopsies from all causes 011 were cancer of the pancreas. Of 622 internal cancers, more than .20 were of the pancreas. Of 460 cases of cancer in all parts of the body 6.3 per cent. were of the pancreas. Since cancer of the pancreas is of such frequent occurrence and presents such varied symptoms it behooves us to be on the lookout for it.

Among the symptoms usally found in cancer of the pancreas are to me digestive disturbance, pain of a neuralgic character in the epigastrium, jaundice appearing late in the disease but persistent; fat in the stools and urine, early and continued loss of flesh and strength, and the presence of a tumor in about one half the cases. It occurs much more frequently in males than females and usually after the age of forty.

Nausea and vomiting are usually present late in the disease; acid eructations, pyrosis, burning in the stomach, thirst, are the results of pressure on the pyloric end of the stomach. Hiccough is sometimes present.

Some of the diseases from which it must be differential are carcinoma of the stomach, diseases of the liver, aneurism of the aorta or cœliac axis, disease of the transverse colon, chronic pancreatis, and in my case, leukæmia.

By carefully excluding these diseases one can often arrive at a diagnosis when the positive symptoms of the disease are absent. In my case I was led to believe I had a case of leukæmia by the long continued fever, the very much enlarged spleen, the anæmia, the progresssive emaciation, by failing to find the tumor in the epigastric region and by the absence of pain of a severe type.

The treatment in these cases is only symptomatic and supportive for we have not yet found a medicine for the cure of cancer.

STRANGULATED HERNIA. WITH FECAL VOMITING 3½ DAYS—OPERATION—RECOVERY.

BY WM. K. SHEA, L. R. C. P.,

PHILADELPHIA.

Thursday evening, January 8, 1891, I was called to see Mrs. R. Her history was as follows: Age, 62 years; mother of a large family, delicate for a number of years, has a mitral regurgitant murmur, and suffered for the past 13 years with a femoral hernia, for which she never wore a truss, it would often come down, and as she described, form a large lump, but was easily reduced without the aid of a physician. On Sunday, 4th of January, without any extra effort being made by her, the rupture came down and could not be re-

duced. She sent for her physician (homœopath). On his arrival he made an examination, and tried to reduce it, but found it impossible to do so, he gave her some medicine and returned each day and made ineffectual efforts to reduce the hernia. Up to the day on which I was called her suffering was very great all the time, and she vomited incessantly. Her physician told her she should be operated on, but she would be obliged to go to a Hospital, to this she and her family strongly objected. As I was her son's family physician he suggested calling me in, first having discharged the homœopath. I found the woman in a very weak state, suffering intense pain, and a large tender tumor at right saphenous opening. After placing the woman on her back and flexing the legs on the abdomen I used ordinary taxis for about 5 or 10 minutes, and felt the tumor gradually give under my fingers, and then suddenly slip away, all pain ceased and the woman was quite comfortable. I left, naturally thinking I had been successful in reducing her hernia. Next day when I called she told me that she vomited all night and that the matter was very foul-smelling. I was shown the vomit and, of course, saw that it was of a fecal nature, and told her the only chance of life was to operate at once. She objected to operation, in fact would not listen to me. Next day, Saturday, the same objection, and on Sunday I asked for consultation, or said I should leave the case. They consented, and I called my friend, Dr. M. Price, who, of course, agreed with me, and we both used our best efforts to have her consent to operation, but all to no effect. Monday morning she still held out and not until the evening of Monday did she give her consent. I at once sent for Dr. Price and Dr. Hewish, and with their kind assistance began operation.

At 9 P. M. Monday, 12th January, I made an incision in the abdomen, median line, about two inches long, passed in my two fingers and found a small knuckle of intestine tightly bound down under the femoral arch. I was obliged to make an incission to relieve it, and not a moment too soon, as it was quite black and almost gangrenous. I brought the part up to the abdominal opening, washed it by pouring some warm water over it and returned all to the abdomen, sewed it up, put on a bandage and left the rest to nature. Half an hour after the operation the bowels were naturally moved, vomiting, of course, all ceased, and she made a splendid recovery. Only once after the operation was there any cause for alarm, on the third day the temperature went down to 95°, but with stimulants and warm jars it at once came up again. Stitches were removed nine days after operation, when the wound was nicely healed up, and now she is going around feeling better than she has felt for years. Here is a case vomiting fecal matter for over 3½ days, refusing all operative interference until the very last moment, and yet she makes a splendid recovery.

Society Reports.

MEDICAL SOCIETY OF NEW JERSEY.

125TH ANNUAL MEETING, HELD AT LONG BRANCH, JUNE 23 AND 24, 1891.

The meetings were presided over by Dr. James S. Green, of Elizabeth. Three sessions were held on Tuesday, the first day, and a final one on Wednesday. The first session was opened by prayer by Rev. C. J. Young, of Elberon. The society then listened to the reading of reports of committees and the transaction of certain business. Dr. H. Mitchell, Chairman of the Committee of Arrangements, read an address of welcome, and later in the day a representative from the Mayor and City Officials, and one from the Board of Trade, addressed the body and welcomed the members to the city.

The subject for general discussion at the next meeting, named by the Business Committee, is "The true pathology of sudden death in acute pneumonia, and the best means of averting it."

Dr. Andrew H. Smith, of New York, Dr. Charles Allen, Dr. John B. Roberts and some other gentlemen, were invited to seats in the body and to participate in the proceedings.

MEDICAL HISTORY OF THE STATE FOR THE YEAR.

Dr. D. C. English, chairman of the standing committee, read the report on the medical history of the State, during the year as it had been obtained from members in different counties.

The report opens with reference to the services and resignation of the former Chairman, Dr. T. J. Smith, of Bridgeton, and of the great importance of securing fuller and more reliable data on which to base a report that will be moderately satisfactory of the Committee and worthy the perusal and study of the profession, and a plan is suggested with that aim in view.

The report then gives an outline of the epidemic of "La Grippe," giving an account of its prevalence, type and fatality in the different Counties:

Atlantic Co.—Less in extent, but as severe in type as the year before, fatality light, mainly among the aged and infirm. Many cases in their onset resembling Typhoid fever. Cases prone to relapse.

Burlington Co.—General throughout County, but varying much in its manifestations. Severe frontal headache, less severe. Mental disturbance less frequent, physical prostration not so marked and recovery more rapid than last year.

Camden Co.—Very prevalent, many cases very severe; prostration extreme, in some cases following cephalgia or acute diarrhœa, others with no appreciable prodroma.

Cape May Co.—Epidemic prevalent and severe with rheumatism and neuralgia as sequelæ. Two fatal cases among aged reported.

Cumberland Co.—Prevalent in many localities, with pneumonia as a frequent complication or sequelæ.

Essex Co.—Generally prevalent, many severe cases, many who had been affected the year before were severely prostrated. In some sections from its manifestations it had been designated "pseudo-grippe," with symptoms not so precise and clinically definite, but enough of characteristic symptoms, signs and clinical aspects to show a cognate origin and course.

Gloucester Co.—No report.

Hudson Co.—Epidemic generally prevalent, worse in some localities than the year before.

Hunterdon Co.—Epidemic in severe form; very generally complicated with diseases of air passages especially pneumonia.

Mercer Co.—Prevalent, but mild in type.

Middlesex Co.—Ditto. Two cases reported complicated with diarrhœa and intestinal hemorrhage, with slow convalescence.

Monmouth Co.—General throughout the County, milder in type than last year. Complications, bronchial or pulmonary nature instead of the nervous disorders of last year.

Morris Co.—Prevailed throughout County in varying degrees of extent, severity and fatality. More catarrhal complications and less general aching and soreness than last year. Another contrast was the frequency with which young children and infants were attacked.

Ocean Co.—Very prevalent with heart and lung complications. Fatality light.

Passaic Co.—Epidemic with greater severity in type than the year before. No deaths from it, but many from pneumonia which attacked persons who had been debilitated by it.

Salem and Somerset Counties.—No report.

Sussex Co.—Not extensive, but many cases in several localities with pneumonia and pleurisy as complications.

Union Co.—Very prevalent throughout the County, but varied much as to extent and severity of type. Pneumonia was a frequent complication, prostration was marked from the beginning of illness, nervous symptoms were prominent. Several cases with inflamed varicose veins as a sequelæ were reported.

Several cases were also reported with double pneumonia with a lack of the usual physical and rational signs of pulmonary disease.

Warren Co.—Prevalent, a few cases very severe and several deaths in complicated cases. Three waves of the epidemic were observed, one in February, another in April and the third in June.

DIPHTHERIA.

In Camden, Morris, Monmouth and Sussex Counties but few cases reported. In Camden City, several malignant cases are reported, which were fatal.

In Cape May and Union Counties it prevailed to a slight extent in some localities.

In Burlington Co.—But few cases are reported. Four fatal cases reported in a locality where night soil was freely used on the lands occupied by the families of those attacked.

In Cumberland Co.—But few cases except in Bridgeton, which reports 191 cases of mild type, with but few deaths.

Essex Co.—Several cases occurred in certain localities, but not prevalent or attended with much fatality. Newark reports 509 cases with 190 deaths, a decided decrease over the year before (1348 cases, with 366 deaths).

Middlesex Co.—Not prevalent. New Brunswick reports only 19 cases.

Passaic Co.—Not prevalent, except in Paterson, where it prevailed of a malignant type, and 35½ per cent. of deaths.

SCARLATINA.

Burlington Co.—Epidemics in different localities of mild type.

Cumberland, Hunterdon, Mercer and Union Counties.—But few cases, sporadic, several localities in each County, generally of mild type, sequelæ rare, and but few deaths.

Cape May Co.—Reports epidemics in two localities, and a few cases in others.

Essex Co.—Reports a decided decrease in number of cases.

Middlesex Co.—Many cases; but hardly epidemic anywhere, mild type and but few deaths.

Passaic Co.—It prevailed in parts of the County, in Paterson to a considerable extent where the mortality was 6¼ per cent.

RUBEOLA.

Burlington, Camden, Cumberland and Ocean Counties—Report a few cases in different localities, generally of mild type.

Cape May and Warren Counties.—Epidemics in certain localities, a few cases in other sections. One case: a child 11 years old with measles of severe type, which disappeared in three days, followed by Scarlatina of severe type which ran its course when Measles again appeared and the child died. In Phillipsburg it was malignant, in one section of city where the sanitary conditions were imperfect. Several deaths occurred from lung and cerebro-spinal disease complicating.

Atlantic, Hunterdon, Mercer, Morris, Passaic, Middlesex and Union Counties—Report epidemics, mostly of mild type, but in Southern part of Hunterdon Co. many of the cases were of a severe form.

An unusual tendency to affect adults and even very old people was observed in Middlesex Co.

Essex Co.—It has prevailed to a considerable extent, but generally of a mild type.

ROTHELN.

Atlantic and Camden Counties—Report many cases, but no general prevalence.

Burlington Co.—Reports epidemics, one noteworthy feature noticed, was enlargement of the superficial lymphatics of the head and neck, accompanied by much tenderness on pressure, but exhibiting no tendency to suppuration.

Mercer Co.—Reports epidemics. Many cases difficult to distinguish from Rubeola, but the two occurring at the same time it was noted that neither afforded protection from the other, nor did roseola offer immunity from scarlatina, which seemed to show that roseola is a distinct eruptive fever and not a hybrid.

Warren Co.—It prevailed extensively in some parts of County. Many children affected with Rubeola had an attack of Rötheln within a month of the time of their recovery from measles.

PERTUSSIS.

Camden and Hunterdon Counties—Reports a few cases, but no general prevalence.

Cumberland, Mercer, Middlesex and Monmouth Counties—Report epidemics in various localities.

MALARIAL FEVERS.

Only three Reporters make reference thereto.

Essex and Hunterdon Counties—Report less prevalence of milder form and more amenable to treatment than for many years.

Middlesex Co.—Reports malaria prevalent in sections where it is usually found.

TYPHOID FEVERS.

Burlington, Camden, Cumberland, Mercer, Middlesex and Union Counties—Report but few cases, mostly of a mild type.

Burlington—51 cases reported, with 4 deaths.

Essex Co.—Newark City reports 359 cases, with 115 deaths, as against 508 cases, with 172 deaths last year.

Warren Co.—A few cases of mild type.

Hunterdon Co.—A few cases in some localities of a low and dangerous form with maximum death rate.

BOWEL DISEASES AMONG CHILDREN.

Atlantic Co.—In the interior many cases of Enteric disease in children.

Cumberland Co.—Cholera Infantum rarely seen.

Middlesex Co.—That Cholera Infantum has been much less than in former years, attributed in New Brunswick to thorough and constant disinfection (with Bromine) of the streets and foul places.

Union Co.—Usual amount, but very mild in type, yielding to simple remedies. Very few fatal cases.

RHEUMATISM.

Prevailed to an unusual extent during the Winter and Early Spring throughout *Atlantic, Cape May and Middlesex Counties*; it was of average frequency in *Hunterdon Co.*, with more complication than usual. It was one of the principal complications and sequelæ of La Grippe.

PNEUMONIA.

Camden Co.—Reports a large number of cases, but not many fatal.

Cumberland Co.—In one locality more extensive than for many years.

Essex Co.—Prevailed to a limited extent, but not of dangerous type.

Hunterdon Co.—Prevalent, and of severe form throughout the County, some fatal in early stages.

Middlesex Co.—A larger number of cases than usual, and several deaths.

Passaic Co.—In Paterson 109 deaths from it during April and May. Last year, same months, 17. The high death rate is attributed to the extreme debility and premature exposure following the grippe.

Warren Co.—In Belvidere it was prevalent. Some of the other Counties report a few cases.

OTHER DISEASES NOTED.

Laryngitis as prevalent in *Camden and Union Counties.*

Follicular Tonsillitis very prevalent in *Cape May Co.*

Conjunctivitis with a tendency to corneal ulceration, a large number of cases in some localities in *Middlesex Co.*

Dysentery as epidemic in Hamburg, *Sussex Co.*, 50 cases with 10 deaths; also in some parts of *Middlesex Co.*

Apoplexy frequent among the aged in *Hunterdon Co.*

Tuberculosis, a slight increase in *Essex Co.* and a decided decrease in *Warren Co.*

Atlantic, Passaic and Hunterdon Counties only report an unusual amount of sickness.

Basing our conclusions on the reports received and on correspondence with the Reporters in relation thereto, Intermittent, Remittent and Typhoid Fevers, Cholera Infantum and Diphtheria, have been far less prevalent in the State during the year than usual; while Pneumonia and Catarrhal affections generally, Rheumatism and Rubeola have shown a decided increase. Scarlatina has not exceeded the average of the past few years.

The Zymotic diseases were generally of a mild type, and their fatality very light. Of the epidemic "La Grippe," we believe it has been considerably less in extent, and as a rule, less severe in type than the year before, while the percentage of mortality has probably been increased by the prevalence of pneumonia as one of its principal complications.

The improvement of the Sanitary condition of the towns and cities by construction of sewers, and introduction of a pure water supply is referred to as a hopeful sign for the future healthfulness of the State.

Reference is then made to some observations on therapeutic treatment of disease.

Large doses of calomel in the beginning of treatment in Diphtheria.

Infusion of Digitalis in Scarlatina.

Veratrum viridi in full doses to abort suppuration in acute Tonsillitis; also in the first stage of pneumonia to lessen its severity and mortality.

Hypodermic injections of strychnia and nitro-glycerin in cardiac weakness in pneumonia, and especially when cardiac failure is feared in the course of pneumonia or of pleurisy.

Salol, in catarrhal and croupous pneumonia; also in Typhoid Fever to reduce temperature, modify the course of the disease, and assist digestion and assimilation; also in cases of partial retention of urine that accompanies enlarged prostate or the more common venous urethral stenosis of old men.

Peroxide of Hydrogen as a germicide in purulent surfaces and sinuses containing or discharging pus; also internally in gastralgia accompanying indigestion with flatulent eructations.

A case of Hepatic Tumor is then referred to.

Also a case resembling in many respects, one of Arsenical poisoning; persistent vomiting and purging for 24 to 36 hours; intense spasmodic pains in stomach, bowels, throat, back and extremities, loss of voice, weakness, prostration and feeble pulse; suppression of urine for 72 hours, brain continuously clear. It was a case of "La Grippe," which recovered.

The rapid strides and new successes in the field of Surgery is referred to, and the remarks of one of the Reporters in reference to Koch's discovery and the distribution and sale of his fluid or lymph.

Also the use of Anæsthetics in Midwifery, and the use of the forceps for facilitating labor.

Attention is called to the 71 diplomas and certificates filed with the County Clerk of Essex Co. during the year.

To the enlargement of the Paterson General Hospital.

To the 11 deaths of members of the Medical Society of New Jersey during the year:

Dr. Henry H. Longstreet, of Bordentown.

Dr. Denman Bevis Ingersoll, of May's Landing.

Dr. Theodore Crane, of Hackettstown.

Dr. Joseph Parrish, of Burlington.

Dr. W. H. O. Taylor, of Union Hill.

Dr. Smith H. Lewis, of Pennington.

Dr. Rodolph E. Gerlach, of Trenton.

Dr. Henry A. Kennedy, of Cape May City.

Dr. Sylvester H. Hunt, of Long Branch.

Dr. J. O. Pumeo, of Elizabeth.
Dr. Abraham Coles, of Newark.

The Report closes with an appropriate allusion to the death of the last elected Honorary Member of the State Society, Dr. Joseph Leidy, of Philadelphia, Pa.

NOMINATIONS FOR HONORARY MEMBERSHIP.

The following nominations for honorary membership were made: Drs. F. R. S. Dennis, V. P. Gibney and John H. Ripley, of New York. Referred to the Committee on Nominations.

PERMANENT DELEGATES.

The last two or three annual meetings the question had been discussed as to establishing a permanent membership. Dr. H. Mitchell, chairman of the committee "On Permanent Membership," appointed at the last annual meeting, read the report of the committee, which favored the election of permanent delegates by the different district societies, said delegates to forfeit their membership should they absent themselves from two successive annual meetings of the state society. The report and resolution were adopted.

A PLETHORIC TREASURY.

Dr. Charles Kipp, of Newark, acted in the absence of the treasurer. It appeared there was considerable surplus in the treasury, and consequently a motion to reduce the annual assessment to one dollar for the ensuing year prevailed without opposition.

THE PRESIDENT'S ANNUAL ADDRESS.

Dr. James S. Green, president of the Society, chose for the title of his address, "A View of Modern Surgery from the Standpoint of a General Practitioner." The era of modern surgery, he said, commenced with the discovery and practical use of anæsthetics. In October, 1846, Dr. Morton of Boston, demonstrated that sulphuric ether could be used in capital operations with the entire prevention of pain. In 1847, Simpson, of Edinburg, introduced chloroform, but owing to the greater danger of this agent, ether was still commonly used in this country. Speaking of cocaine and local anæsthesia, he said the possibilities of cocaine had not yet been fully appreciated by the profession at large.

PROPER CARE AND DRESSING OF WOUNDS.

More or less varied ideas had prevailed regarding the proper care and dressing of wounds previous to the modern era of surgery, but the advantages of present methods over the former might be inferred from the statement that formerly surgeons sought to produce suppuration and prevent primary union, while now they aim to prevent suppuration and obtain union by first intention. One superiority of modern surgery was related to our ability to conquer hæmorrhage during operations by means of the Esmarch bandage. Modern surgery had given special attention to the region of the abdomen, and lately a great deal of study had been given appendicitis, a condition which was now known to be of frequent occurrence, and responsible for a large number of deaths. It had been shown that early laparotomy in recurring appendicitis was not only justifiable, but was demanded.

The reader also referred to the revival of the operation of suprapubic cystotomy, the application of aseptic and antiseptic surgery in the treatment of phlegmon, to tenotomy for deformities, and emphasized the need of more general application of the principles of modern surgery to the treatment of burns. The custom still prevailed unduly of wrapping the burn in cotton and oil, and exposing it to dirt, as well as of favoring sepsis by leaving dead tissue to slough instead of scraping it away. Brain surgery, and the moral obligations of surgeons, also received attention.

Mr. Morris, representing the Long Branch Commissioners, and Mr. McFadden, of the Board of Trade, were introduced, and in well chosen words welcomed the society to Long Branch, and invited the members to visit the different points of interest.

INTUBATION OF THE LARYNX.

Dr. Walter B. Johnson, of Paterson, read an exhaustive paper on the subject of intubation of the larynx in diphtheria, including a report of eighteen cases. To be successful, intubation depended upon: 1, The use of a properly constructed instrument; 2, The skill and judgment of the operator; 3, The delicacy of the operation; 4, Knowledge of the requisite medical treatment; 5, Proper feeding and care; 6, The variety of the disease; 7, The severity of the epidemic; 8, The extent of the complications; 9, Careful examination of the patient at frequent intervals and preparation for combatting complications or obstructions to the tube.

Regarding the construction of the tube, the author quoted from Dr. Dillon Brown's paper which contained an account of the steps in the perfection of the tube as it had been invented by Dr. O'Dwyer. Instruments were exhibited. Of the eighteen cases

reported in the paper, only three recovered. In all the operation was performed during the night of the fatal epidemic of diphtheria in Paterson between July 1890, and February, 1891. In seven months during this epidemic 259 cases of diptheria were reported, with 103 deaths. The eighteen cases undoubtedly would have shown a more favorable result had the epidemic not been of so severe a form. The tube was a source of relief and comfort in nearly every case. Even if the mortality had not been lessened, the relief from dyspnœa and the comfort afforded would justify the operation.

Delegates from other states were present, as follows: Dr. Crothers, of Connecticut, Dr. Swing, of Pennsylvania, Drs. Furbeck and Willy Meyer, of New York; also two members from the Pharmaceutical Association, New Jersey.

DISCUSSION ON TUBERCULOSIS.

The discussion upon the subject presented at the last annual meeting, "Tuberculosis—the Potential Factors in its Spread, Whether Hereditary Capacity, Inherited Bacillus, or Transmission from Inferior Animals," was opened with a paper by Dr. Edgar Holden, of Newark. Comparatively few doubted at present the ætiological relation between tuberculosis and the tubercle bacillus of Koch. The two prime factors in discussing the subject under consideration were, the bacillus, and man's vulnerability. The tubercle bacillus could be shown to be propagated by inhalation, by inoculation, by ingestion, and by inheritance, although the proof of some of these modes of propagation were not altogether convincing. The author reviewed the nature of this proof, and gave considerable credit to Philadelphia, Boston, and Baltimore. The chief method of acquiring tuberculosis was through inhalation of dried particles in the air containing the bacillus tuberculosis. The much greater danger from this source was clearly shown to exist in rooms where those suffering from tuberculosis lived, and especially where no attention was given the proper disposal of the sputa. The possibility of spreading the disease by inoculation was worthy of thought by butchers and by physicians in making autopsies and performing operations. As to propagation by ingestion of food, it might be stated that Shurely and Gibbs, of Detroit, denied that the tubercle bacillus of animals and that of man were identical. But the author thought there was satisfactory evidence of the danger of tuberculosis in the meat of all animals, however limited might be the disease. Nor was it necessary that the udder itself be diseased to make the milk of a tubercular cow unsafe. In this country three to twelve out of every hundred cows were said to have tuberculosis. The need of legislative action was manifest.

Regarding the question of transmission of tuberculosis by inheritance, there had been much dispute. The author did not doubt the inheritance of a vulnerability or tendency to the disease, but could only review the literature regarding the possibility of the tubercle bacillus being transmitted from the mother to the offspring. Positive evidence on this subject was hardly to be found, although a few authors had claimed to have found the bacillus in the fœtus before birth.

Elsewhere Dr. Holden had shown by statistics of life insurance that few persons lived to seventy-five years among whose near relatives there had been consumption, while it was not at all difficult from the same statistics to find over one hundred persons over seventy-five years of age among whose relatives there was no history of consumption. In concluding his paper the author expressed his conviction that the spread of tuberculosis was in proportion to exposure to the bacillus and the vulnerability of the individual.

Dr. J. W. Stickler, of Orange, held essentially the views expressed by the author, in proof of which views he analysed some statistics given by the late Prof. Austin Flint, and reviewed some facts stated in literature. Some cases had been reported of tuberculosis in the fœtus, or in the infant dying soon after birth; but the reporter had not stated that he had found the bacillus. The author thought that if the bacillus itself was inherited it must be limited to cases of tuberculosis of the testes, of the ovaries, of the placenta, or general infection.

DIET AND CARE OF NEW JERSEY COWS.

Dr. Henry L. Coit, of Newark, chairman of the committee "To investigate the subject of the influence of diet and care of cows upon the constitution of their milk, and the action of this milk upon the human subject when it proves injurious: Further, to determine what current practices in their feeding and care are prejudicial to this probuct." Read the report, which was only a provisional one. The committee was to consist of forty members, different counties to be represented, and Dr. Coit had found the work of organizing the committee and carrying on the investigation a slow one because a great one. The paper pointed out some reasons for making this investigation, all based on the import-

ance of obtaining pure milk for food, especially as food for infants. That the diet had a marked influence on the constitution of the milk had often been shown, and he had no hesitation in saying that a large proportion of the dairymen of his own state used unhealthful products, such as were obtained from breweries, &c. In his opinion there ought to be a constant relation between the price of milk and its quality. The dairy people got only two cents a quart for their milk while the average cost of good milk had been shown to be one and eight-tenths cent. The temptation to use unhealthful food products was evident.

The committee's request to be continued was granted.

SOME RECENT VIEWS ON PERITONITIS.

Dr. John G. Ryerson, third vice-president, read a paper with this title. The interest in the appendix, he said, was so widespread at the present time, and disease here so frequent, that the consideration of peritonitis in general would excite little interest. He would, therefore, speak only of a few points in the history of peritonitis of which the appendix might be the cause.

McBurney and other surgeons of to-day advocated early surgical interference in appendicitis and removal of the appendix. They taught that the surgeon should be called in early by the attending physician; that, if possible, he should make frequent visits before operating in order to become familiar with the case by personal observation. Now, we know that septic peritonitis begins early; that from the beginning the conditions necessary for its septic character occur, and that when once this form of peritonitis sets in even surgical interference will not save the patient. In this form of the disease, therefore, there lay little hope of diminishing the mortality rate. But under the older method of treatment, according to Noyes, the percentage of deaths was only fifteen, and even those who favored modern surgical treatment admitted that one-half, or at least two-fifths, of this percentage could be placed to the credit of septic peritonitis. Reasoning in this way, and taking the figures of those who favored surgical interference, the author arrived at the conclusion that modern surgery had left only five per cent. of all cases on which to improve of existing modes of treatment. While, therefore, the surgeon to-day was most active and zealous, he thought the physician should not give up the field. There were two methods of medical treatment in vogue, the opium and the saline. For his own part, he favored the old fashioned method introduced by Alonzo Clark, of quieting pain and stopping peristaltic action by the administration of a sufficient amount of opium to accomplish this purpose. He believed the general adoption of this method would be more likely to reduce the mortality rate than more frequent resort to surgical interference.

In the ætiology of appendicitis, the possibility of its being of epidemic character had scarcely received mention, yet its history pointed pretty strongly in that direction. This suggested the possibility of the blood being at fault, or a microbe being the cause, and of grounds for using drugs which had not yet been appreciated.

AN ATTEMPT TO SHOW WHAT NEW JERSEY SURGEONS HAVE DONE IN ABDOMINAL SURGERY.

Dr. Edward J. Ill, gave statistics in this paper based on more or less limited reports of operations in abdominal surgery sent him by different physicians and surgeons of the state, including a brief account of nearly one hundred cases in his own practice. It seemed that, in spite of the fact that New Jersey lay between two great surgical centers, Philadelphia and New York, a large number of operations in abdominal surgery had been performed by her own medical profession.

OFFICERS FOR THE ENSUING YEAR.

For President, Dr. E. J. Marsh, of Paterson; First Vice-President, Dr. George T. Welch, of Passaic; Second Vice-President, Dr. John G. Ryerson, of Boonton; Third Vice-President, Dr. Sproull; Corresponding Secretary, Dr. William Elmer, Jr.; Recording Secretary, Dr. William Pierson; Treasurer, Dr. Archibald Mercer. Place of meeting, Atlantic City.

SELECTED FORMULÆ.

THE EMPLOYMENT OF KOLA NUT.

Huchard gives the following prescription in the *Revue Général de Clinique et de Thérapeutique* for the administration of kola nut:

℞

Tincture of kola	1 ounce.
Tincture of coca	1 ounce.
Tincture of squills	½ ounce.
Tincture of digitalis	2 drachms.
Simple syrup	2½ ounces.
Red wine	1 pint.—M.

Allow the sediment to settle, and then decant and filter. Two or three teaspoonfuls

of this mixture may be given each day for eight or ten days in cases of cardiac disease requiring tonics. In other cases the following may be employed:

℞ Fluid extract of kola } of each 6 drachms. M.
Fluid extract of coca }

A small teaspoonful should be taken after luncheon, with a little simple syrup or Malaga wine. This mixture should not be given at night, because the kola produces insomnia in some patients. The dose of it should be from 20 to 30 drops three times a day: as, for example, at 8 o'clock in the morning, at midday, and at 4 o'clock in the afternoon.—*Med. News.*

PRURITIS ANI.

Kelsey prescribes acetate of potassium, ten grains three times a day internally, and a ten per cent. solution of nitrate of silver locally, to be followed by the following ointment:

℞
Menthol.....1 drachm.
Simple cerate.....2 ounces.
Oil sweet almonds.....1 ounce.
Carbolic acid.....1 drachm.
Powdered oxida of zinc.....2 drachms.
M. Sig. Apply morning, noon, and night, after cleansing the parts.

TREATMENT OF TYPHOID FEVER.

The *Revue Général de Clinqiue et de Thérapeutique* gives the following method used by Tessier in the treatment of typhoid fever: Morning and night a powder composed of 5 grains of alpha-napthol and 3 grains of salicylate of bismuth is given. In addition four injections are used, at intervals of twenty-four hours, with the object of increasing diuresis. After the midday injection he prescribes the following tonic and antipyretic mixture:

℞
Extract of chinchona..... ..... 1 drachm.
Sulphate of quinine.....15 grains.
Tincture of valerian..... 1 ounce. M.
Teaspoonful at a dose.

Tessier also applies cold compresses to the head and abdomen, and the patient is allowed 10 ounces of Bordeaux wine and one and a half pints of milk or broth in the twenty-four hours. He employs alpha-naphthol in preference to beta-naphthol because the latter is very much more poisonous; thus, to produce poisoning in a man of ordinary weight it is necessary that twice as much alpha-naphthol be given as of beta-naphthol. In consequence it is possible to give larger doses of alpha-naphthol without danger, and obtain thereby a greater degree of intestinal antisepsis. The cold baths which he recommends augment, in his opinion, the elimination of toxic substances in the urine, and the naphthol stops their production in the intestine.—*Med. News.*

GONORRHŒA.

Thomas R. Neilson states that the plan of internal treatment which he has pursued for so many years past, consists, first, during the earlier stages of the disease, in the administration of an alkaline sedative mixture, with the purpose of alleviating the scalding caused by urination, the tendency to frequent micturition and to chordee. The standard formula in his dispensary practice has been:

℞
Potass. acetat.....℥ij–ℑss.
Potass. bromid.....ℑss.
Acid. boric.....ℑj ℈ij.
Tinct. belladon.....ℳxxx.
Liq. potass. citrat.....℥viij. M.
Sig. A teaspoonful in water every three or four hours.

Secondly, as soon as the symptoms are in a measure relieved, the administration of either oleoresin of cubebs and balsam copaiba in capsule, or of cubebs alone in powder, in teaspoonful doses, or finally, where chordee is troublesome, a combination of two parts by weight of powdered cubebs and one part of bromide of potassium, given in the same doses, and from three to four times daily.
—*Univ. Med. Magazine.*

TREATMENT OF DYSENTERY AND OXYURIS WITH NAPHTHALIN.

Dr. M. C. Minerbi, in the *Journal de Méd. de Paris*, May 31, 1891, speaks highly of the value of naphthalin in the treatment of both dysentery and oxyuris.

In the former instance the drug is used either in the form of suppositories or oily injections. The suppositories are prepared by the following formula:

℞
Cocoa butter
Naphthalin, aa.....10.0 grammes.
M.

If the ulcerations are seated so high up in the intestine that the suppositories cannot affect them, the author resorts to the following enemata:

℞
Olive oil.....20.0 grammes.
Naphthalin..... 5.0 grammes.
M.

In dysentery very frequently, owing to the existing tenesmus, these injections cannot be retained for more than half an hour. In such cases the injection should be repeated three or four times in twenty-four hours. Ultimately, however, the patient will be able

to retain the injection until it is absorbed. One great advantage of the treatment is that it does not produce constipation.

Rosbach employs naphthalin in dysentery in the following formula, which, however, Minerbi considers inferior to that advocated by himself.

℞
Boiling water.....100.0 grammes.
Naphthalin..... 5.0 grammes.
Decoction of marshmallow...500.0 grammes.
M. Sig. For one injection.

The mixture should be heated to 37° C. at the time of using.

The treatment is contraindicated in cases where the ulcerations extend to the small intestine, which is, however, rare.

Dr. Minerbi has also used naphthalin with considerable success in the treatment of oxyuris vermicularis. Eleven children, troubled with this parasite, were completely cured within eight days.

The formula employed was the following:

℞
Naphthalin.....1.0--1.5 grammes.
Olive oil..... 40--60 grammes.
M. Sig For one injection.

In treating the same trouble in adults a stronger formula may be advantageously employed, as follows:

℞
Naphthalin..... 5--6 grammes.
Olive oil.....60--80 grammes.
M. Sig. For one injection.

TREATMENT OF SYPHILIS DURING PREGNANCY.

Dr. E. Besnier, in the *Journal de Méd. de Paris*, May 31, 1891, claims to have found the following treatment for syphilis during pregnancy, both safe and efficacious.

I. *Tonic treatment.*—This consists of a good nourishing diet, syrup of iodide of iron and preparations of cinchona internally.

II. *Specific treatment.*—One pill of the following formula should be administered daily:

℞
Bichloride of mercury.....0.01 gramme.
Extract of opium.....0.005 gramme.
Extract of gentian..... 0.005 gramme.
Glycerin, q. s.
For one pill.

III. Simultaneously iodide of potassium should be exhibited in doses of gramme 0.5 to gramme 1.0.

This treatment should be continued during the entire course of pregnancy. An increase of the patient's weight is a sign of its success.

PYRIDINE IN GONORRHŒA.

℞
Pyridine..... ♏v
Aq. distillat.....℥ij
Sig. One injection daily.

—*Rademacker.*

TREATMENT OF OTALGIA.

℞
Chlorinated camphor..... 5.0 grammes.
Glycerin.....30.0 grammes.
Oil of sweet almonds.....10.0 grammes.
M. Sig. For the ear.

Place a small tampon of cotton, wet with this mixture, in the ear.—*Allg. Wiener Med. Zeitung.*

PURGATIVE PILL.

The following formula is recommended by Dr. Ball, in the *Journal de Méd. de Paris*, May 31, 1891, as constituting a pleasant and efficient purgative pill.

℞
Socotrine aloes..... 1.0 gramme.
Resin of scammony.....0.50 gramme.
Resin of jalap.....0.50 gramme.
Calomel.....0.50 gramme.
Extract of belladonna.....0.23 gramme.
Extract of hyoscyamus.....0.25 gramme.
Castile soap, q. s.
To make 40 pill. Dose, 3 to 5 pills a day.

FOR ECZEMA.

According to the *Centralb. für die gesammile Therapie*, the following formula will be found very useful in the treatment of eczema not of a chronic nature.

℞
Thymol..... 2.0 grammes.
Oxide of zinc } aa.....25.0 grammes.
Starch }
Lanolin.....50.0 grammes.
M. fiat unguentum, et Sig. Salve, to be applied to the affected parts.

SOLVENT FOR DIPHTHERITIC MEMBRANE.

℞
Pepsin.....ʒiss.
Acid. hydrochloric. dilut.....♏j.
Aquæ destillat
Glycerini, aa.....ʒss. M.
Apply to the surface.

—*Canada Lancet.*

SALICYLATE OF SODIUM FOR CORYZA.

The *Journal de Médecine de Paris* gives the following:

℞
Salicylate of sodium } aa.....ʒss.
Syrup of orange }
Peppermint water.....ʒvi. M.

At the onset of the attack a teaspoonful to a dessertspoonful should be given every three or four hours.

COCAINE IN ASTHMA.

C. R. D. Sylva (*Indian Med. Gaz.*, March, 1891) reports a case in which very severe attacks of asthma were in a few minutes entirely relieved by the following subcutaneous injection:

℞
Cocaine hydrochlor.
Morph. sulph., aa.....¼ gr.
Aquæ distil., q. s. M.

THE

MEDICAL AND SURGICAL REPORTER.

ISSUED EVERY SATURDAY.

EDWARD T. REICHERT, M. D.,

PROFESSOR OF PHYSIOLOGY, UNIVERSITY OF PENNA.,

EDITOR AND MANAGER.

N. E. Cor. 13th and Walnut Streets,

P. O. Box 843. Philadelphia, Pa.

THE MEDICAL AND SURGICAL REPORTER.

TERMS: Five dollars a year, strictly in advance, unless otherwise specifically agreed upon. Sent 3 months on trial for $1.

At the termination of the period of subscription, we will promptly discontinue sending THE REPORTER unless directed to the contrary by the subscriber.

Remittances should be made by draft, check, postal note, or money order payable to Edward T. Reichert.

THE POCKET RECORD AND VISITING LIST.

Two sizes. Prices to subscribers of THE REPORTER: For 30 patients a week (with or without dates), $1.00. For 60 patients a week (without dates), . . $1.25. Prices to non-subscribers, $1.25 and $1.50 respectively.

THE MODEL LEDGER.

Physicians who keep their own books will find this of great value. Sample pages sent on application. Price, $5.00.

SUGGESTIONS TO SUBSCRIBERS:

See that your address-label gives the date to which your subscription is paid.

In requesting a change of address, give the old address as well as the new one.

If THE REPORTER does not reach you promptly and regularly, notify the publisher *at once*, so that the cause may be discovered and corrected.

SUGGESTIONS TO CONTRIBUTORS AND CORRESPONDENTS.

Write in ink.

Write on one side of paper only.

Write on foolscap or legalcap paper.

Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate or omit words like "the" and "a," or "an."

Make communications as short as possible.

NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.

When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.

The Editor will be pleased to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

LEADING ARTICLE.

ANTISEPTICS IN THE TREATMENT OF TYFHOID FEVER.

Since the germ theory of disease has become established upon a firm scientific basis, the idea of treatment directed towards the neutralization of these specific organic poisons has naturally arisen. Although much progress has been already made in this direction in the treatment of many medical affections, it must be admitted that the results obtained in surgical practice are of far more practical importance than those arising from the use of antiseptics in non-surgical practice. To appreciate this we have only to glance over Hospital statistics, and find that whereas the mortality of all grave surgical procedures is immensely less, the same cannot be proven of those medical cases in which a living organism has been shown to be the essential cause. The cause of this difference in statistics is obviously the comparative ease of application of antiseptic treatment in surgical practice, and the insurmountable difficulties which at present prevent its use in cases where the seat of infection is the intestinal canal, and the blood itself.

While the ideal antiseptic has yet to be discovered, much good work has been done in this direction by many prominent clinicians, and perhaps no disease has been more vigorously attacked by antiseptic remedies, than typhoid fever. Indeed, it may be affirmed with some truth, that the idea of maintaining, as well as possible, intestinal antisepsis in this disease, occurs to almost every practitioner of the present day, and in the opinion of some, it is the method by which the best results can be obtained. No agent has yet been discovered which can affect the poison of typhoid fever in the circulating blood without being equally poisonous to the patient, so that, at present the questions are: Can we disinfect the intestinal canal, and thus favorably influence the course of the disease, does this method of treatment give better results than when other measures are adopted?

With the numerous modes of treating typhoid fever now in vogue, the answers to these questions cannot be authoritively made at present, but it is generally admitted that we possess certain antiseptic remedies which are capable of making the stools less offensive, of limiting somewhat the duration of the fever, and of lessening the abdominal tenderness and meteorism. Such agents are very commonly employed as adjuncts to other methods of treatment. But the effect of a *purely* antiseptic treatment upon the mortality needs further observation.

The maintainence of intestinal antisepsis depends largely upon the diet, which should be of such character as to be readily absorbed, and so contribute as little as possible to fermentation. The quantity of food is also most important, and no more should be given than can be readily assimilated, for, unless this is done, the food collects in the intestines, rapidly undergoes fermentation with the production of noxious solids and gases, and painful tympanites results. For this reason milk, diluted with lime-water, light watery soups, and proper amounts of pure water would seem the rational diet, since they are readily assimilated, and furnish plenty of liquid to carry away the waste products of tissue changes. Such a diet leaves a minimum of residue in the intestines, and hence is more suitable when intestinal antisepsis is aimed at.

The cheap drugs which have been lately used to promote antisepsis in the intestinal tract, are: naphthol, thymol, salicylate of bismuth, mercury in some form, carbinate of bismuth, chlorine, hydrochloric acid, turpentine, sulphide of carbon, boric acid, benzoic acid, carbolic acid, quinine, hydro-naphthol, and a number of others. The reported accounts of the use of any of these agents as an exclusive mode of treatment are too meagre to admit of any intelligent comparison of their relative values. They are all used for the same purpose, and none of them has proved entirely acceptable. Dr. J. Burney Yeo, Professor of Clinical Therapeutics, at King's College, London, has had very marked success with a mixture of chlorine and quinine, and in a late lecture (*The Lancet*, April 18, 1891) he highly recommends it, and strongly urges the expediency of some means being always adopted to secure as perfect an antisepsis as possible in the intestinal tract. To those interested in this subject, this lecture is well worth careful reading, as it details the history of the application of antiseptics in typhoid fever, as well as gives his own experience. Dr. J. Mitchell Clarke, has experimented favorably (*The Practioner*, Dec., 1888 and July, 1890) with *B*-naphthol and hydro-naphthol. His results were 1, "Reduction of the average duration of the fever; 2, Less offensive stools; 3, Less abdominal distention; 4, Early cleansing of the tongue and less dryness of mouth and lips; 5, Abscence of albuminuria; 6, Convalescence more rapid and strength less reduced; 7, Less risk of propagation of the disease; 8, Diminished tendency to secondary complications." Dr. Yeo states, in his lecture above mentioned, that M. Maximovitch prefers *A*-naphthol to *B*-naphthol, because it is three times less tonic, yet prevents the development of the typhoid bacillus when used in the proportion of 1 part in 10,000; and also that Dr. Moncorvo (*Satilliti*, Feb. 1890) has given *B*-naphthol to children in doses of gr. xv to gr. xxx, and that such doses were tolerated perfectly.

Liebermeister (Von Ziemssen's Cyclopædia of Practical Med.) urges the claims of mercury and iodine, giving the latter dissolved in a solution of the iodide potassium. Mercury he employs in the form of calomel. He found the mortality less in two hundred cases treated by calomel, than in a large number treated without it.

Experiences of leading physicians might be multiplied, but as they are too widely different as regards the conditions surrounding their cases, and the drug employed, to secure intestinal antisepsis, it is impossible to more than gain a general idea of the value of this treatment. That the idea of intestinal antisepsis is rational all admit, and it also may safely be said, that the experience already obtained from the use of antiseptics is highly encouraging. The end to be ob-

tained is most desirable, for by influencing the local conditian of the gut, the general toxæmia seems apparently proportionately lessened. Only time and an experience long enough to permit of the comparrison of reliable statistics of the use of the several remedies lately brought forward, can settle the question as to the best mode of securing the minimum amount of septic fermentation in the intestine, and, as has already been said, the kind and quantity of the food will prove an important factor towards this result. In this connection, the use of pepsin suggests itself, to complete the imperfect gastric digestion, and it is routinely given by Dr. W. H. Thomson, at the Roosevelt Hospital, New York, in conjunction with dilute mineral acids.

Since it has been proven beyond doubt that antiseptics play a most important role in the modern treatment of typhoid fever, it becomes every practitioner of medicine to consider carefully the means he shall employ to fulfill the indication which always is present in this disease. No one drug or mixture can be solely recommended for this purpose, and further, in many cases certain remedies are contra-indicated by the existing conditions of the stomach, but in all cases where no such contra-indication is present, an antiseptic of known value should constitute a part of the treatment, for its *specific effect* upon the bacillus. The favorable experience of chlorine and quinine by Dr. Yeo, of calomel aud iodine by Liebermeister and others, and the naphthol and hydro-naphthol by Clarke, (as well as the reported value of many other antiseptic remedies) allows of considerable latitude in the choice of the drug to be employed. It is to be hoped that these antiseptics will be given a larger trial in the Hospitals of this country, side by side with other modes of treatment, including the treatment by cold water baths, as introduced by Brand, and it is needless to say, these statistics obtained in this way, from single large Hospitals, will be most valuable in determining which drug, of those already employed, will most adequately fulfill the purpose of limiting to a minimum the production of toxic ptomaines, or similar substances, and thus prevent their introdution into the already poisoned blood.

All our knowlege of the pathological conditions which exist in typhoid fever, suggests persistent effort towards this line of treatment, as being the most rational and direct method of combating the disease, and although the remedies as at present used may fall far short of perfection, still, as has been said, the experience of acute observers proves how much room there is for hope in this direction.

Enough proof of the efficacy of the antiseptic treatment of typhoid fever is forthcoming to warrant the assertion that it should be given a high place among the measures usually employed.

Book Reviews.

DIGESTION AND DIET.—By Sir William Roberts, M. D., F. R. S., Philadelphia. Lea Brothers & Co., 1891.

This book embraces, in one volume, all the contributions made by the author, at various times, to the subjects relating to Digestion, Dietetics and Dyspepsia. It is arranged in four groups or sections.

Section I., is occupied in the consideration of *digestion and the digestive ferments.*

Under the head of "The Preparation of Artificial Digestive Juices," the author records the results of a series of experiments made, with the object of ascertaining the best preservative of artificial degestive juices, which either had little taste and smell, or one which was volatile and could be got rid of by vaporisation. The investigations were begun with the ultimate view of obtaining a solution of these ferments which could be administered as a medicine by the mouth, or which could be employed in the preparation of artificially digested food.

After a number of trials, these solutions were adopted: Dilute Spirit; Boracic Solution, and Chloroform Water. Preferance being given to the first.

Section II., deals with the subject of *dietetics*, and it contains much useful information of undoubted value to the busy practitioner.

Section III., treats of the *preparation of food for invalids.* As this is a matter of no little importance to the general medical man,

and has considerable bearing upon the success of any treatment, the author has justly seen fit to occupy considerable space to the consideration of such topics as the preparation of ordinary food for invalids; the preparation and use of artificially digested food, the use of malt, and especially of malt infusion, for the free digestion of starch food, etc.

SECTION IV. on *dyspepsia*, relates to the so-called acid dyspepsia of otherwise healthy persons.

The entire work is well worthy of the efforts of its distinguished author, and not only will amply repay the time spent in a careful perusal of its contents, but it often will be found a very convenient book to have in the library for ready reference.

MEMORIAL SKETCHES OF DR. MOSES GUNN. By his wife.

A book of 380 pages, with the above title, is filled with a well-written description of the personal attributes, and scholarly attainments and professional success of a man who rose to the first of American surgeons.

Born in East Bloomfield, N. Y., April 20, 1822, of good parentage, he was liberally educated, graduating in medicine in 1846, and the same year commencing lectures upon Anatomy at Ann Arbor, which he continued until the founding of the medical department of the University of Ann Arbor, Michigan. He was then elected Professor of Surgery, and held the chair until 1867, when he resigned to accept a similar position in the Rush Medical College, Chicago. Since then his reputation has extended to every part of the country as an eminent teacher.

These sketches, by his wife, will undoubtedly come to his many personal friends as a delightful reminder of the man, containing, as they do, many little stories which cannot fail to perpetuate the memory of his many virtues. To others, also, who have never viewed a doctor's life from the standpoint of his wife, the book will be worth reading. None can fail to gather some lesson in its pages, regarding the successive periods in medical life, and over all the pages is the pathos of a wife's description.

EUCALYPTUS DISINFECTANT.

The oil may be dissolved in alcohol, 1 in 20; it may be used in powder, 2 parts oil, 10 borax, 60 infusorial earth or other cheap absorbent material; even sawdust would answer readily and effectively.

PERISCOPE.

THERAPEUTICS.

THE PLACE OF MERCURY IN THERAPEUTICS.

Dr. E. P. Hurd, in the *N. C. Med. Jour.* reaches the following conclusions:

1. Mercury must still take the palm over all other remedies in the treatment of secondary syphilis. Here the choice is between two evils; but the syphilitic poison is a greater blood-spoiler than mercury when judiciously administered; and, in antagonizing and destroying the virus of syphilis and preventing its ravages on the blood, mercury becomes a genuine reconstituent tonic. The mercurial treatment is not to be commenced *until the syphilis has declared itself*, and is to be instituted only in the secondary stage.

2. Mercury (under the form of calomel) has no place in medicine as an antiphlogistic or alterative, and its employment in fractional doses in combating inflammations, whether acute or chronic, should be absolutely discarded.

3. Calomel has a limited usefulness in infantile therapeutics, but principally as a gastric sedative and as a thorough antiseptic cathartic.

4. Calomel is an efficient purgative, stimulating the secretions of the intestines and liver and promoting intestinal peristalsis; it remains so long unchanged in the alimentary canal that it exercises a local antiseptic and sedative effect, and hence proves valuable in many morbid states of that canal. As a cathartic it is good to clear the *primæ viæ*, especially when no other cathartic can be borne, owing to irritability of the stomach; in the onset of some inflammatory or febrile diseases it may have a useful depurative and even derivative effect.

5. In the ordinary "bilious" complaints calomel has a place which is entirely subordinate to other more rational and hygienic modes of treatment.

ANTIPYRIN IN PLEURITIC EFFUSIONS.

At a meeting of the Société Nationale de Médecine de Lyon, on April 20th (*Lyon Médical*, May 10th, 1891,) M. Clement presented a communication on the effect of antipyrin in pleuritic effusions. He said his attention had been called to the subject three years before, and his conclusions were based on observations made in some twenty cases.

When a patient comes under his care with signs of pleural effusion he marks the upper limit of dullness with lunar caustic, and can thus note the slightest variation in the amount of the fluid. Whether fever be present or not, he at once administers antipyrin without any other medication whatever. In all cases there was, on the following or at latest the day after, a marked reduction in the height to which the dulness reached. In some cases the dullness disappeared after forty-eight hours' treatment, and in two or three the fluid was completely absorbed in twenty-four hours. In no case was the effect delayed beyond four days. The dose given was, as a rule, 6 grammes a day, 1 gramme being given every four hours. After absorption of the fluid the treatment should be continued for some days longer, in order to prevent relapse, the daily dose being, however, reduced to 4 grammes. The cases treated by M. Clement included examples of acute pleurisy *a frigore* and latent pleurisy; both forms yielded readily to treatment, the effect being rather more rapid in the latter than in the former. The treatment failed when the effusion was purulent or bloody. In cases in which the whole pleural cavity was filled with fluid, M. Clement did not feel himself justified in trying the antipyrin treatment, but performed thoracocentesis without delay. With regard to the *modus operandi* of the remedy, he says that even when resolution was almost immediate, nothing like diuresis took place, the amount of urine being increased only from 100 to 200 grammes in the twenty-four hours. In some patients no diaphoresis was observed; in others it occurred after resolution had taken place. Resolution occurred as rapidly in the non-febrile as in the febrile cases. M. Clement thinks antipyrin has a specific action on nearly all inflammatory processes, and it is to this that he attributes its beneficial effect in pleural effusions.—*Brit. Med. Jour.*

SALOL IN TYPHOID FEVER.

Dr. Frank P. Wilson, writing in the *Southern Clinic* for March, 1891, says that he has found salol to be a very satifactory remedy in rheumatism, but that in infantile diarrhœa he has also found its administratin attended with good results. The use of one grain of the drug every four hours promptly checked the diarrhœa, and the continued administration of the remedy two or three times a day for a few days effectually prevented a relapse. In typhoid fever he had had very favorable results, and in all cases in which he had given it from the onset of the disease there was no tympanites, no diarrhœa, no dry tongue, nor sordes on the teeth. Even when the treatment was begun late in the course of the disease, when the symptoms were already grave, the whole condition was changed for the better within two days by two or three grain doses of salol every four hours. He did not believe that the duration of the fever was shortened at all, but all the symptoms were ameliorated, delirium was kept away, and the patient preserved a desire for food, usually waiting anxiously for the milk hour to come around. One grain of salol was given every four to six hours, except when there was severe diarrhœa, when the dose was doubled for a short time.

CACTINA: A NEW AND VALUABLE CARDIAC STIMULANT.

Dr. O. M. Myers, has contributed to the *N. Y. Med. Jour.*, a very suggestive article on cactina, which is the proximate principle of the plant *Cereus grandiflora* (the night-blooming cereus; Ger., *Königin der Nacht*), natural order *Cactaceæ*, which is indigenous to tropical America. The active principle has been successfully isolated by Frederick W. Sultan, Ph. G., the well-known pharmaceutical chemist of St. Louis. For this purpose he employs the young flowers and stems of the Mexican variety, in which the yield is greater and more constant than in other species. It is thus described: "The stem is branching, fleshy, green, and five or six angled. The angles are beset with clusters of five or six short radiating spines. The numerous imbricated calyx lobes are linear, acute, brownish, the inner ones yellow. The flowers, which open in the night, are very fragrant and produce an orange-colored, internally white berry the size of an egg. The flower of this species is decidedly the richer in active principle and yields 0.021 to the 1,000, or over two per cent."

Physiological Action.—Locally, cactina is absolutely non-irritant, a ten-per-cent. solution applied to the conjunctiva producing no noticeable effect.

Therapeutic doses, in man and animals, produce an acceleration of the pulse and a rise in the arterial pressure.

Toxic doses, in animals, produce primarily an acceleration of the pulse-rate and a rise in the arterial pressure, but, secondarily, notably diminish both. The cardiac pulsations become arrhythmical and finally cease,

the heart being arrested in systole. The systoles, just before death, become very incomplete, probably due, as will be shown below, to a condition of superirritability of the cardiac ganglia. Death is preceded by tetanic and clonic convulsions, due to overstimulation of the motor side of the spinal cord. That the convulsions are not of cerebral origin is evident, as they occur after section of the cord in the upper cervical region. The motor nerves remain unaffected, for, after the death of the animal, galvanization produces contraction of the muscle. Cactina is therefore a powerful *motor spinal stimulant.*

SUMMARY.—Cactina in therapeutic doses—

1. *Increases the musculo-motor energy* of the heart, probably through its influence upon the intracardiac motor and accelerator ganglia, in consequence of which the cardiac impulses become regular and much stronger.

2. *Elevates the arterial tension*, increasing correspondingly the height and force of the pulse wave. This is produced by—*a*, increased cardiac action; *b*, stimulation of the vaso-motor center at the base of the brain.

3. *Influences the nervous system* by its direct action upon the motor centers of the spinal cord, thus increasing the reflexes and elevating the general nervous tone. Herein cactina resembles strychnine, and other points of similarity are evinced by clinical observation.

Therapeutics.—It logically follows, if conclusions as to its physiological action are correct, that in cactina we have a powerful cardiac tonic-stimulant. Clinical observation teaches that its greatest value is manifest in functional disturbances of the heart, as simple dilatation and cardio-muscular atony (resulting from deficient innervation and nutrition) without organic lesions. If valvular disease exists, accompanied with dilatation. In conditions of cardiac and general muscular relaxation with impaired nerve energy, and in case of "irritable heart," "tobacco heart," etc., the drug accomplishes excellent results; probably by, *a*, stimulation of the spinal motor-nerve centers; *b*, constantly stimulating the heart muscle to action and thereby increasing its nutrition and development.

A special indication for its use is during the critical periods of adynamic fevers, as it combines the elements of a heart and spinal motor stimulant.

Unlike digitalis, cactina may be administered continuously without fear of exciting gastric disturbance, and the objectionable cumulative action of the former drug is entirely absent. In short, cactina may be employed with benefit in all varities of functional cardiac and circulatory disturbances and in organic heart disease, except in cases of *mitral stenosis*, where digitalis is to be preferred on account of its power of prolonging the diastolic period, thus affording the ventricle power and time to entirely empty itself. *Per contra* in *aortic insufficiency*, the short diastole produced by cactina allows no time for regurgitation of blood into the ventricle, whereas digitalis, by prolonging the diastolic period, favors just what we should seek to prevent.

Preparations of *Cereus grandiflora*, *C. Bonplandii*, *C. McDonaldii*, and other allied varieties, have long since been employed in medicine, but the results have been uncertain. This is accounted for by the fact that the yield of active principle varies greatly in the different species of the plant and in the same species in different habitats. Under such circumstances the strength of preparations would necessarily be so inconstant as to make them unreliable for use. The same may be said of many other valuable drugs, such as cannabis indica, ergot, etc., of which two preparations of the same strength can hardly be found. The difficulty has been entirely obviated in the case of *Cereus grandiflora*, for, by the isolation of its active principle, we have the means of employing it in constant and definite quantities.

THE TREATMENT OF CHRONIC ATROPHIC RHINITIS (OZÆNA).

As Dr. De Havilland Hall, writes in the *Med. Press*:

Though local treatment is all important in atrophic rhinitis, it is well before commencing it to see if there be any underlying general condition of ill-health which needs correction. If anæmia be present the combination of ten grains of the ammonio-citrate of iron with three minims of arsenical solution given thrice daily exercises a beneficial effect. If there be any tendency to phthisis cod-liver oil should be administered. The iodides do not seem to have any good effect in the ozæna due to atrophic rhinitis. The essential point in the local treatment is the thorough cleansing of the nasal cavities. This may be effected in three ways:—(1) By means of the douche. (2) By the use of the anterior and posterior syringe. (3) By spraying. At one time I used the douche almost exclusively, but of late years I have entirely given it up. Several cases of otitis media due to the fluid passing up the Eustachian

while the douche was in operation have been recorded, and though I had had no personal experience of this accident it was one of the reasons which induced me to discontinue this form of treatment. Pins' modification of the douche to which Dr. Ball has recently directed attention seems to obviate this objection. The anterior and posterior syringe answers fairly well in the less severe forms of the disease, but where crusts have collected on the sides and roof of the nasal passages the only effectual method of washing them away is by means of a spray emitted with considerable force from the apparatus. For those who prefer the douche or the syringe the following solution may be employed.

℞ Sodii bicarb., Boracis, aa.....ʒj;
Glycerini acidi carbol.....ʒij;
Aquam, ad.....Oss.

This is known as Dobell's solution.

Bayer, however, states that carbolic acid is not to be recommended locally because it often completely destroys the power of smelling in those cases in which it has been preserved. Chlorate of potassium, or liquor potass. permanganatis may be substituted for the borax, great care should be taken that the solution used should be of a suitable temperature.

I have found "Listerine," an American preparation containing thyme, eucalyptus, and other essential oils, together with benzoboracic acid, a most serviceable and pleasant disinfectant. It may be conveniently employed in Dobell's solution instead of the glycerine and carbolic acid in proportion of one or two of listerine to ten of the lotion. As on account of the chronicity of the disease the employment of expensive drugs, or any drugs at all for the matter of that, is a matter of serious consideration to persons of limited means, it is often necessary to use the cheapest preparations. For this purpose common salt, two drachms in half a pint of water, or chlorate of potassium one drachm, or liq. potass. perm. one drachm in same amount of water will be found very useful.

My mode of treatment is first to soften and loosen the crusts as much as possible with a simple saline spray. For this purpose I usually employ bicarbonate of sodium, chloride of sodium borax, of each thirty grains, white sugar, forty-fives grains in half a pint of warm water. This is practically the formula introduced by Morell Mackenzie. If on rhinoscopic examination hardened masses still adhere to the mucuos membrane they may be cautiously removed by means of the nasal forceps, or by the use of the anterior or posterior nasal syringe. The patient should be told to use the spray at least night and morning, sometimes three times a day may be necessary, and to come again in a week's time. If on the second interview the nostrils are found to be free from crusts and fairly sweet, the patient is to be directed to continue the same treatment. If crusts are again met with they should be removed as on the first occassion. The simple saline spray may be continued for some weeks, and if there is no evidence of distinct improvement it will be well to make a change. I have found the addition of listerine to the alkaline spray useful in diminishing the fœtor from the nose and acting as a mild stimulant. If a more powerful disinfectant is required Dobell's solution may be used, and the amount of carbolic acid increased if necessary, also weak solutions 2 to 5 grains of sulphate of zinc, alúm, or nitrate of silver will at times be found useful. The permanganate of potassium formula or creolin 1 to 500 up to 1 to 100 is useful as a change. After thorough cleansing of the nostrils insufflation may be employed. For this purpose I have used iodoform, idol. or boric acid. Recently aristol (the iodide of thymol) has been highly recommend. Many other combinations have been advised, but whatever is used it must be distinctly understood that it is not so much the particular solution employed as the thoroughness with which the process of cleansing the nostrils is carried out which conduces to the cure. Again, it is very desirable to ring the changes on the solutions employed. After thoroughly spraying out the nasal cavities I have found smearing the interior with oil of eucalyptus and vaseline (a drachm to the ounce) servicable, as it as it appears to prevent the mucous membrane from becoming dry. The vaseline should be warmed and applied by means of a camel's hair brush. Another plan is to spray out the nostrils with one of the liquid paraffins, *e. g.*, paroleine.

In intractable cases Gottstein's tampon is very useful. To obtain the best effect the plug of cotton wool should be in contact with the whole of the interior of the nostril. The plug acts as a stimulant to the mucous membrane and so keeps up a certain amount of water discharge, thereby preventing the formation of crusts.

Ruault recommends the following method of treatment:—

The nostrils are to be washed out with a solution of bicarbonate of sodium. They

are then to be painted with naphthol-camphor, which consists of one part of naphthol to two of camphor with a variable quantity of fluid vaseline according to the sensitiveness of the patient. The drying of the mucous membrane is prevented by frequently spraying the nostrils with fluid vaseline with the addition of naphthol-camphor (1 to 10,000 up to 1,000). Later on, to replace washing out by means of inhalation of vapor benzoini.

Resorcin, the galvanic cautery, the constant current, and innumerable other plans of treatment have been suggested; the very number of drugs recommended being a proof that no one of the number can claim to be a specific. I have, however, I think sufficiently described the best plans of treatment in vogue, and I need only add that I shall be extremely thankful for some new hints for combatting this troublesome affection.

MEDICINE.

A CASE OF ANGINA LUDOVICI.

Dr. T. Arnallt Jones, in the *Lancet*, says: A man aged fifty years was seized early in the morning with a severe prolonged rigor, dysphagia, and great pain in the mouth and submaxillary region. I first saw him at 9 A. M. His temperature then was 105° F.; pulse 150; respiration noisy, due to swelling up of tissues about the laryngeal orifice; headache, prostration, and covered with cold sweat. On looking into the mouth the tongue was seen pressed up against the palate by the swollen sublingual tissues; and so considerable and firm was this sublingual cellulitis that a spatula could only with difficulty be passed between the tongue and palate; depressing the tongue was quite out of the question, consequently the fauces could not be inspected. The patient could neither swallow nor speak, and it is surprising how he was able even to breathe as well as he did. There was albuminuria to the extent of one-sixth. The sublingual tissues were scarified, and leeches applied below the jaw. Poultices and steam inhalations were ordered. These measures relieved the pain somewhat, and in the evening the temperature fell to 103°, but the dysphagia and dyspnœa continued. The following morning the temperature was 104°. Submaxillary œdema increased, with commencing redness of the skin, and cellulitis was spreading down the neck between the sterno-mastoids. The patient was feebler, and the dyspnœa greater. To relieve tension and drain the tissues two deep incisions were made in the middle line of the neck—one an inch long above the hyoid bone, which reached well down to the floor of the mouth; the second, two inches long, over the cricoid cartilage and thyroid isthmus. The tissues cut through were swollen and sodden, and foul, serous blood-stained fluid poured out from both. These incisions gave marked and speedy relief, and the patient was very shortly able to swallow and speak distinctly. Hot fomentations of tenax were applied, and quinine and aconite administered. Evening temperature 101°; great relief. Brandy mixture ordered.—Third day, 9 A. M.: Temperature 100°; not quite so well. 1 P. M.: Temperature 104°; swelling and redness over upper part of sternum; leeches and poultices applied. 11 P. M.: Temperature 101°; swelling over the sternum disappeared; feels much better.—Fourth day: Temperature 100°; much improved; wounds discharging.—Fifth day: The patient up and about; feels much better, but very weak. From this to the seventeenth day the patient improved, the incisions healed, and he became practically well. Angina Ludovici is attended by a considerable mortality, and is fortunately not of common occurrence. The relief and arrest of symptoms afforded by the incisions and leeching were so marked that they should form the essence of treatment in this disease, and to be of service incisions must be made early in the case. It is too late to cut when the tissues of the neck are sloughing and the cellulitis is spreading down to the chest and the patient showing signs of profound blood-poisoning. There was no local condition, such as a carious tooth or ulcer of the mouth or pharynx, to account for the onset of the angina; but the patient's occupation, that of a butcher, suggested the possibility of his having absorbed or been inoculated with some animal or specific poison.

UNUSUAL COMPLICATIONS OF ENTERIC FEVER.

Finlayson, in the *Amer. Jour. of Med. Sciences*, gives instances of nine unusual complications of typhoid fever.

1. Abortive attacks not free from danger. In an epidemic of enteric fever in the Glasgow Western Infirmary, several of the inmates had slight febrile attacks lasting a few days and ending in recovery. One patient had an attack in which the fever lasted but

two days; fifteen days after the cessation of fever she had a relapse, which proved fatal in four weeks.

2. Carbuncle and death following an obscure illness, with little or no pyrexia. A gentleman, in whose house typhoid fever occurred, was ill and out of sorts for two weeks; his temperature never rose above 99°; this was followed by a carbuncle, which caused death from septicæmia.

3. Uræmic convulsions. A case of supposed typhoid fever, with highly albuminous urine, which contained hyaline and granular casts, was seized with convulsions, evidently uræmic, and died on the seventeenth day.

4. Grangrene of the sole of the foot. One month after the fever began in this case, a gangrenous spot appeared on the sole of the foot, where there was no pressure; the case developed cystitis, and died in the sixth week.

5. Alarming nervous disturbance with the subsidence of pyrexia. A case with relapse ran a course of four weeks; there were but few nervous symptoms; but as the fever declined, delirium set in, low and muttering, with terrible visions; a peculiar tremor of the head and complete sleeplessness also occurred.

6. Double periostitis with necrosis. A case with relapse lasted five weeks; over two weeks after defervescence, there was sudden elevation of temperature, with pain in both tibiæ; necrosis followed, and the patient was under treatment at the end of the eighth month.

7. Gangrene of the lung. Consolidation of the base of one lung took place in the fourth week of the fever, which was followed by gangrene of the lung. Death occurred in the eighth week.

8. Paralysis and anæsthesia of the limbs after recovery. Three weeks after recovery from typhoid fever, numbness and stiffness of the legs supervened, followed by weakness of the arms. Great wasting of the muscles occurred; there was complete inability to stand. Recovery took place under treatment with tonics and electricity.

9. Concurrent development of enteric fever and tubercular meningitis. A young man was taken suddenly ill, with symptoms of meningitis; the meningeal symptoms cleared up and the case ran a course of typical typhoid fever. During the course of the fever peculiar urinary symptoms arose; fever subsided, but progressive emaciation occurred, and signs of meningitis again appeared. He died of meningitis in about one month from the beginning of his illness. The *post-mortem* showed typical tubercular meningitis, and partially healed ulcers of Pyer's patches, which were distinctly *not* tuberculous.—*Univ. Med. Mag.*

HEMIOPIC HALLUCINATIONS.

With reference to the paper on this subject recently published by Dr. Peterson of New York, of which a notice appeared in our columns, Dr. Schweinitz in the *New York Medical Journal* refers to a case published by him as one of a series in 1887 in the *Journal of Nervous and Mental Diseases.* The patient was a young man of twenty-nine, who had several convulsions and was the subject of optic neuritis with left homonymous hemianopsia. He became mentally deranged and was sent to an asylum. Preceding the onset of hemianopsia he had visions of chairs, tables, and other common things floating about. Although he was quite rational at the time, he was unable to state whether those visions disappeared coincidently with the onset of the hemianopsia or persisted for a time. He died afterwards in the asylum, and at the necropsy there was found a gummatous infiltration at the base of the brain pressing on the right optic tract. The author is unable to state definitely that there was no affection of the occipital lobe, and he regards the case as one of the class described by Dr. Peterson in which the hemiopic hallucinations are simple and transitory.—*Lancet.*

TEMPERATURE IN EPILEPSY.

M. Bourneville (*Revue de Médecine*, April, 1891) considers the subject of temperature in epilepsy under the following heads:—(1) During the epileptic attack isolated epileptic fits cause the temperature to rise from $\frac{1}{10}$° to 1½° C.; (2) in a series of fits with intervals more or less long, during which consciousness always returns, the temperature behaves as in the first group—between this class of case and the status epilepticus there are intermediate conditions; (3) during the status epilepticus, characterized as it is by (*a*) an incessant repetition of the fits, so that often one fit begins before the other ends; (*b*) a stupor varying in degree, but which may end in absolute coma with no return of consciousness; (*c*) a hemiplegia more or less complete and transient; (*d*) frequency of the pulse and respiration, and especially by (*e*) a considerable rise of temperature persisting between the fits. M. Bourneville divides the epileptic state into two periods (1) con-

vulsive, (2) meningitic (*période méningitique*). After the temperature has risen considerably, corresponding to the convulsive stage, matters improve and the temperature falls. Then appears this meningitic stage, which may terminate in death or recovery. The status epilepticus does not always establish itself at once, and this is especially the case in partial epilepsy. The internal or central temperature (for example, in the rectum) was taken in all these cases. M. Bourneville gives many examples illustrating these views.—*Brit. Med. Jour.*

THE PREVENTION OF PHTHISIS.

The high rate of mortality from phthisis induced the State Board of Health of New Hampshire to secure the opinion of the physicians of the State upon certain points in connection with the disease, such as its cause, frequency, preventability, treatment, etc. To this end blanks were sent to all physicians of the State asking them to answer nineteen stated questions. The returns were exceedingly complete, and as reported in the recently issued annual report of the State Board of Health, make interesting reading. A summary is almost impossible but the Board presents the following:

The chief causes and the preventative measures to be employed in the disease may be summarized, in the light of our present knowledge of the disease, as follows:

1. Pulmonary phthsis is the most fatal disease known to civilization.

2. The *bacillus tuberculosis* is generally believed to be the cause of the disease.

3. The disease, when developed after the first years of childhood, is acquired and not inherited, although there may be an inherited predisposition which renders the subject incapable of resisting the invasion of the bacilli.

4. The disease is liable to appear at any period of life.

5. That there is great danger arising from the use of tuberculous meat and milk. From the evidence which has been gathered we are led to believe the liability to infection from these sources is very great and to insure public protection in this particular the State should exercise a careful supervision of our milk and meat supplies.

6. That the greatest danger of infection is from the sputa of the consumptive. For this reason, when confined to the house, a spit-cup or spittoon should be used, and when upon the street a handkerchief to receive the expectorations. The spit-cup or spittoon might perferably contain a disinfectant, but if these vessels are frequently and thoroughly cleansed with boiling water, disinfectants are not an absolute necessity. The handkerchiefs should be immersed in boiling water at least once daily before the sputum has become dried.

7. No person should occupy a sleeping room with another who has tuberculosis, although many persons escape infection under such conditions.

8. The eating utensils of a consumptive should be washed in boiling water, and care should be exercised that the same glasses, spoons, etc., are not, before being washed, used by children and others. The patient should avoid kissing others or placing in his mouth any article likely to be used or handled by others.

9. The dejections of consumptive patients in cases where the bowels are affected should be thoroughly disinfected.

10. Perfect cleanliness of the apartments occupied by consumptives should be urged in all cases. The bed-linen, towels, etc., should be very frequently put through the operations of the laundry, while the walls should be frequently cleansed and dressed anew. In fact the whole question of restriction may be expressed in one word "cleanliness."

SURGERY.

CONSERVATIVE SURGERY OF THE GALL BLADDER.

Prof. E. Rose, of Berlin, writes: The principles which should actuate us in the treatment of affections of the gall bladder are laid down by the author as follows:

Cholecystectomy (extirpation of the gall bladder) need not, as a rule, be resorted to, except in cases of malignant or complete degeneration. It may be replaced by local treatment of the gall bladder, and measures calculated to restore the outflow of bile into the cystic duct.

Another reason against the utility of extirpation, is the possibility that the occlusion of the cystic duct may be followed by dilatation of the biliary passages.

Cholecystotomy with immediate suture and closure of the abdominal wound, is capable of affecting a cure in from two to three weeks, without dangerous complications, as is shown by the author's experience.

In chronic supuration of the gall bladder, with occlusion of its efferent duct, obliteration of the organ can sometimes replace an extirpation.

Cholecystostomy, or the establishment of a biliary fistulæ, is a palliative operation, and is of especial value, when neither extirpation nor removal of the obstruction in the cystic duct is possible. It is not a radical operation, for, owing to the loss of bile, these fistulæ rapidly produce exhaustion.

Biliary fistulæ sometimes heal spontaneously without apparent cause and sometimes after removal of the cause.

In appropriate cases we are warranted in opening the gall bladder, and for that purpose even perform a laparotomy and search for, and, if possible, remove the obstruction in the gall bladder.

We can best inform ourselves regarding the condition of the gall bladder and the permeability of the bile passages by digital exploration and catheterization of the ducts.

After the obstruction has been removed, if the gall bladder is healthy, it may be immediately sutured and returned to the abdominal cavity; or if this is prevented by adhesions, we may establish a safety valve by the formation of a biliary fistulæ which is allowed to close gradually.

It is only when the cystic duct is permanently closed that we have to decide between obliteration, extirpation or cholecystostomy. —*Deutsche Zeitschrift fuer Chirurgie.*

THE SURGICAL TREATMENT OF NEUROSES.

Little by little gynæcologists are gaining courage and endeavoring to extend the scope of their favorite operation, that of the removal of the uterine appendages. Not content with the rich harvest of ovaries afforded by uterine myomata and chronic inflammatory affections of the annexes, they yearn to emasculate—or rather effeminate—women whose only offence is that of being unnecessarily irascible during the menstrual period. They loudly proclaim their intention of proceeding with the utmost caution, and well they may, for the result so far has not been very encouraging in spite of the one or two apparent successes recorded by the Napoleon of ovarian surgery. The consensus of opinion, on the part of psychologists and gynæcologists alike, is distinctly adverse to the idea that any benefit is likely to be derived from the operation in the majority of cases of insanity in females, even when the condition is exasperated by the menstrual function. There is, of course, this to be said, that no harm is done even in case of failure, because it is to the interest of the community that these women should not procreate, but neither public nor professional opinion is as yet prepared to admit this argument to possess even a negative value. Another point is, that a speculative operation of this kind would not justify incurring even the smallest risk to life. Fortunately, we are assured by Mr. Mayo Robson, that so far as the mortality of the operation is concerned, it may be treated as a *quantité négligeable.* It is hardly safe to be too dogmatic in refusing recognition to the operation when practised for the relief of mental conditions assumed to be more or less intimately associated with menstrual excitement. Professional opinion has undergone such a radical change during the last few years in respect to this branch of surgery that the prophet's role is an uncomfortable one, and is, moreover, one which we are by no means anxious to assume.—*Med. Press.*

PRIMARY RESECTION OF GANGRENOUS INTESTINE IN HERNOITOMY.

In the *Beitrage zur klinischen Chirurgie,* Bd. 7, Hft. i, Dr. F. Krumm, of Heidelberg, discusses the indications and contra-indications of primary resection with apposition of the divided portions of intestine by circular suture in cases of gangrenous hernia. The question has been much discussed since the adoption of antiseptic methods into practical surgery, and with many German surgeons of great authority it is still a disputed point whether such treatment be justifiable or not. The views expressed in this paper are based on a study of fifteen cases of gangrenous hernia, which were treated in Professor Czerny's clinic in the course of a period of nearly twelve years. In nine of these cases an artificial anus was established, and in four the gangrenous intestine was cut away and the divided portions of the intestinal canal were brought together by circular rows of sutures. The first mentioned plan of treatment resulted in complete recovery in five cases, and was attended by fatal results in the other four. Of the cases of primary resection, three were successful, in the fourth case death, which occurred on the operating table, was due to asphyxia. Dr. Krumm points out that the surgeon, in dealing with gangrenous hernia, has to decide between one or other of these two operations. The fact that in fifteen cases of gangrene of intestine in connection with strangulated hernia Czerny, who is an advocate of primary resection and circular suture, had recourse to the formation of artificial anus affords a proof that in many instances of this compli-

cation there can be no room for choice between the two methods. The latter operation alone is indicated under the following circumstances: Gangrene involving not only the strangulated intestine, but also the sac and the surrounding structures; when the patient is in a condition of extreme collapse; when the strangulation has been much prolonged and has caused severe symptoms and a large accumulation of fæcal matter in the intestinal canal. With regard to primary resection, Dr. Krumm holds that recourse to this method is justifiable in recent cases of strangulated hernia, especially cases of so-called elastic strangulation of intestine, in which the tendency to gangrene is due to congestion of the blood vessels of the strangulated loop, and not to accumulation of fæcal matter, provided also the mesentery be not too much and too extensively constricted. Cases of fæcal strangulation are not altogether excluded, but here, it is held, much judgment is required and a careful selection must be made. In such cases primary resection is not to be taken into consideration unless the strangulation has been of brief duration and the symptoms of intestinal obstruction are very severe. Exhaustion and collapse, and well-marked symptoms of peritonitis, are decisive contra-indications to such treatment. It is also contra-indicated in cases of advanced phlegmon of the structures surrounding the hernial sac and of the anterior wall of the abdomen. In such cases an artificial anus is already in process of development, and firm adhesions are probably already well established between the intestine and the hernial rings. Moreover, in such instances perfect asepsis cannot be attained. On the other hand, partial gangrene of the normal sac is not a contra-indication, since by removal of all the gangrenous parts and by energetic disinfection after provisional occlusion of the abdominal cavity a fairly aseptic field of operation may be produced. As primary section demands, as conditions of its successful performance, not only an experienced operator but also skilled assistance and a very strict attention to all the details of the antiseptic method, it ought as a rule, Dr. Krumm suggests, to be restricted to Hospital practice. Notwithstanding the many contra-indications which are carefully and candidly discussed in this paper, there still exists, it is stated, a certain class of gangrenous hernia in which primary resection of intestine and circular suture may be regarded as the proper method of treatment. With regard to the comparative mortality of the two methods of dealing with gangrenous hernia, it is pointed out by Dr. Krumm that the most recent and complete statistics show that the percentage of deaths is rather smaller after primary resection than after the formation of an artificial anus.—*Brit. Med. Jour.*

GYNÆCOLOGY.

MINOR UTERINE SURGERY.

The Uterine Sound.—On the whole, it had been better for womankind had this instrument never been invented. For the application of the electric current it has its uses, and in an occasional case where one is uncertain as to the connection of the uterus with a given tumor it may possibly give some definite information. For the purpose of measuring the depth of the uterine cavity, or for locating the position of the fundus, as it is generally used, it is absolutely superfluous. Any one who is forced to use it for these purposes, unless it be in rarely exceptional cases must confess to himself his lack of even an ordinary amount of manual dexterity. For replacing a displaced womb it is a dangerous instrument, and its use is very painful. A movable uterus can be invariably replaced by bimanual manipulation, with the patient on the back, or in the knee-chest position, with the aid of a tenaculum and a repositor. If the organ is adherent it no longer comes under the head of simple uterine disease, and should then be dealt with by other and safer procedures. The uterine sound may be used with perfect safety in careful hands; but, as ordinarily employed, it is capable of causing considerable traumatism, and of carrying septic material into the uterine cavity.

Dilitation.—This operation is one which has been much abused. It is capable of much good or much harm, depending upon whether it is used carefully and in suitable cases or not. Personally I have never had any permanent bad results follow its use. On the contrary, I have seen severe dysmenorrhœa relieved and even permanently cured; in not a small proportion of cases have I observed pregnancy follow dilatation. Patients have come to me suffering from a pelvic inflammation following a dilatation performed by others, but everything pointed to the fact that the pelvic disease had existed first and that the operation had been performed probably under a mistaken diagnosis for the relief of symptoms produced by the diseased appendages. In but one case have I had an inflammatory attack follow this operation when there was no complicating

disease. In that case I made an incomplete dilatation without ether upon the dispensary table, in a young woman, married for 5 years and sterile. The inflammatory attack cleared up within a week, she soon conceived, and a month ago I delivered her safely of a large, healthy baby. She made a perfect and uncomplicated recovery. I should be exceedingly loath to discard the dilators from my armamentarium, and can only attribute serious accidents following their use to a wrong diagnosis or a faulty use of the instrument.

Intra-uterine Medication.—There is undoubtedly a limited field for the application of drugs to the uterine cavity. It should not be forgotten, however, that it is often only supplementary to other treatment. It is just as rational to expect results from local applications to the uterine mucous membrane, as from applications to the mucous membrane of the nose and throat. The fault here is much the same as in other minor operations—either a wrong diagnosis is made, or local applications are used to the exclusion of other and probably better methods of treatment, or they have been injudiciously and rudely applied. Certainly in chronic endometritis we may expect some good from them, especially after the application of the curette.

The Curette.—This instrument, in properly selected cases, is invaluable. In my own hands the dull curette has proven worthless, and I much prefer a sharp one. Of course, the instrument is capable of harm, but so is every other that is used in surgery. If even ordinary precautions are taken in selecting cases and manipulating the curette, no damage will follow its application. For affections of the endometrium following labor, or of a fungoid character, it is exceedingly useful; I know of nothing which will take its place. In removal of retained clots, etc., in the puerperium, the finger will be found to be more certain.

Operations on the Cervix.—The splitting up of the cervix for dysmenorrhœa and sterility has fallen into deserved disuse; all that can be accomplished in that direction can be done with the dilators.

Emmett's operation for the closure of lacerated crevix should meet much the same fate, at least in the vast majority of cases. The only excuse for the number of such operations which are being continually performed is a fear of subsequent cancer. A simple, uncomplicated cervical tear causes no more trouble or inconvenience to the patient than does a woman's ear which has been torn through by her earring. The ear would be repaired for cosmetic effects; the cervix is hidden from view, and that factor would not come into consideration. Most women have lacerations of the cervix of a more or less degree. If the lips are thickened, everted and eroded, they will need treatment. Oftentimes simple scarification, followed by the application of iodine and glycerin tampons, will reduce this condition and leave a clean, healthy tear—one which will remain so until the end of time. If the lips cannot be brought into a healthy condition, or if the uterus is subinvoluted and the endomentrium diseased, the case may resolve itself into an operative one; but even here a trial with electricity will often disappoint the surgeon. In my practice it is rare to see a a lacerated cervix which calls for surgical repair. Cases which come to me from other men, who have advised an operation, get well without it. Oftentimes the symptoms for which the operation was proposed were found to be due, not to the torn cervix at all, but to other troubles, principally constitutional.

It is the easiest thing in the world to relight a pelvic inflammation whilst repairing a cervix, and I have seen this result follow such practice only too often.

Taking it all in all, I decidedly approve of minor uterine surgery in the field to which it is applicable. but it must be borne in mind that this field is a limited one, and one which becomes more and more narrow as our diagnostic resources increase.—*Dr. J. M. Baldy, in the Medical News.*

GRAVES'S DISEASE RELIEVED BY REMOVAL OF SLOUGHING FIBROID.

Dr. Carl Wettergreen (*Centralb. f. Gynäk.*, February 28th, 1891; *Eira*, No. 11, 1890, p. 334) describes a case in which a woman, aged 47, suffered for over two years from a bleeding fibroid as well as from Graves's disease. The anæmia was extreme, apparently secondary to the hæmorrhage, and of the pernicious type. Therapeutic measures were tried for a time with no effect, except that the fibroid was delivered through the os and cut awuy with Siebold's scissors. It was bigger than a man's fist, submucous, and in parts gangrenous. After the operation the hæmorrhage ceased. The patient became much stronger; the protrusion of the eyeballs and the rapid pulse and palpitations abated to a marked degree.—*Brit. Med. Jour.*

THE NATURE OF HÆMATOSALPINX.

Dr. H. Walter (*Inaugural Thesis*, Giessen, 1890) strongly contests the now prevalent doctrine that hæmatosalpinx almost necessarily implies tubal gestation in a very early stage. He made a series of sections from two cases operated upon at Giessen, and examined them very carefully under the microscope. There was no distinct evidence of tubal pregnancy. He found structures which bore a certain resemblance to chorionic villi. He believed that they were shreds of structureless membrane with dark borders—mere fragments of fibrin in fact. Dr. Walter—in opposition to Orthmann—holds that tubal gestation cannot be diagnosed with certainty, unless at least decidua cells are present. He admits that, in his cases, the etiology was negative, yet by comparison the history and clinical course of the cases with the microscopic appearances of the sections of the tubes, he feels constrained to insist that the true nature of the disease was hæmorrhage into the tubal canal as a result of catarrhal inflamation of the tube. Hæmatosalpinx may involve grave results, but it does not follow even then that the original cause is tubal pregnancy.—*Brit. Med. Jour.*

OBSTETRICS.

PLACENTA PRÆVIA.

Braxton Hicks (*L'Union Med.*) lays down the following rules as regards treatment:

1. The diagnosis of placenta prævia once established you must terminate labor with the least possible delay.

2. When the operation has been commenced you must not leave your patient until it is completed.

3. When the cervix is completely dilated and the placenta is marginal, it is necessary to break the membranes, and see whether the head is pushed toward the neck during the pains.

4. If the head descends slowly, employ the forceps or perform version.

5. If the os is small and is more or less covered by the placenta, the latter should be cautiously detached around the whole circumference of the os. If there is no hæmorrhage, delay of one or two hours is permissible. If the os is not dilated and if you have no dilator at hand, you may dilate the cervix manually. If you think that the forceps may be easily applied, it is well to apply them. If not, it is necessary to do bi-polar version by the combined internal and external method. The cervix is thus tamponed by the legs or breech of the child. After this the treatment is the same as for any case of foot or breech presentation.

6. If the neck is small, and if you have neither forceps nor dilator, version must be done.

7. If during the manoeuvers here mentioned, a violent hæmorrhage occurs, version must be terminated by extraction of the fœtus.

8. When the fœtus is dead, or when labor comes on before the end of the seventh month, it is necessary to do version and leave the rest to nature.—*Archives of Gyn.*

UNIQUE CASE OF CÆSAREAN SECTION.

Dr. Chas. P. Noble reports in the *Amer. Jour. Obstet.* an exceptionally interesting case of cæsarian section.

On the 27th of April, 1890, he was called to see Mrs. J., the messenger stating that she was in labor, the water having come away. He found her a vigorous little woman, 27 years of age, fifty-five inches in height. She was in the ninth lunar month of her sixth pregnancy. The first four pregnancies ended in miscarriages. The fifth pregnancy was terminated by Cæsarean section, done by Dr. Howard A. Kelly, April 17th, 1888. During this labor Mrs. J. was successively in the hands of a midwife, a physician, and two physicians in consultation. The grave nature of the case was not recognized, and the attendants waited for two weeks for the cervix to dilate. At the end of two weeks Dr. Kelly saw her in consultation. The pelvis was found choked with inflammatory exudate, which made an absolute barrier to delivery *per vias naturales*. Cæsarean section was done, as affording the only hope to the patient for life. At the time she was profoundly prostrated, with a pulse of 142. A feeble, jaundiced infant was delivered, which lived a week. As a result of the conditions present at the time of the operation, the uterine wound became infected; circumscribed peritonitis, with adhesion of the womb to the abdominal wall, resulted, and later a breaking down in the line of union in the abdominal wall and uterus occurred, and thus a utero-abdominal fistula formed through which the uterine contents discharged externally. The cervix broke down, and half of it came away in a slough. The patient had a narrow escape, but recovered. The fistula never healed soundly; at times it would heal, only to break down at a

menstrual period to allow of the escape of some of the menstrual blood. The patient's general condition became good, and the pregnancy resulted which is the subject of this communication.

On examination Dr. Noble found that the membranes had ruptured, and that the waters were coming away through the ventral fistula, which was dilating under the influence of the feeble pains which were present. The cervix was scarcely at all dilated, and the os could be felt surrounded by cicatricial tissue left from inflammatory processes attending the preceding labor. It seemed plain, from the condition of the soft parts alone, that, were spontaneous labor possible, the child would be delivered through the ventral fistula and not through the vagina. The scar from the former Cæsarean section was found quite stretched out by the intra-abdominal pressure. The recti muscles were separated about one inch. The fistula was situated about midway between the pubes and the umbilicus. Projecting through the fistula a process of amnion was plainly seen. The child lay in the third position. The head was quite movable above the superior strait. The fœtal heart tones were easily heard, showing that the fœtus was alive, though it evidently was quite small and immature. The soft parts of the pelvic outlet were those of a nullipara. The cervix formed the centre of a mass of scar tissue. The lateral pelvic walls were easily palpated; but, owing to the scar tissue back of the cervix, it was difficult to reach the sacrum.

The pelvic measurements were as follows: A. S. S., twenty centimetres; Cr. I., twenty-five centimetres; D. B., fifteen centimetres. The conjugate diameter cannot be taken, owing to the fixation of the cervix.

The technical details of the operation were unique. Dr. Noble's index finger was inserted through the fistula into the uterus, and upon this as a guide he incised the uterus and abdominal wall above and below the fistula with the knife and scissors as far as the region of utero-abdominal adhesion. Sufficient room not being afforded, the peritoneal cavity was opened and the uterine incision prolonged upward; a leg of the fetus was now seized and the fetus turned and delivered. It was feeble and immature (thirty-third week), and lived only a few hours.

The placenta and membranes were found strongly adherent, and it required some time to remove them. In the meanwhile hæmorrhage was quite free and could not be controlled in the usual way, by the assistant grasping and compressing the cervical region, because of the intra-abdominal fixation. Dr. Noble quickly inverted the uterus through the operation wound, which enabled the assistant to grasp the lower uterine segment and control the bleeding, while he peeled off the secundines. The finger was now passed through the crevix to provide a vent for the lochia. The walls of the fistula were exsected, and the uterine incision closed by fifteen deep and seven superficial stitches. Some of the deep stitches passed through both uterine and abdominal walls, through the region of uterine adhesion. The fact accounts for the small number of superficial stitches used. The uterine wound was closed in twenty-nine minutes. The peritoneal cavity was now cleansed and the remaining sutures introduced. The patient was put to bed without shock. The convalescence was rapid and uninterrupted. Primary union of the operation wound was obtained; and, although a number of the buried uterine sutures have been discharged, the fistula has not re-formed.

Several features of this case make it of more than ordinary interest: The operation being unique, both in its indication and in its technique.

The case is of further interest from the fact that Mrs. J. is the second woman in Philadelphia to recover from the Cæsarean operation; curiously enough, the subject of the first Cæsarean section in this city also had two operations and likewise recovered from both, the operations being done in 1835 and 1837.

Practically, the most striking feature in the case is the difference in the convalescence after the two operations—the first done late, under desperate circumstances; the second done early, when the woman was in good condition. It is but another illustration of the folly and hazard of delay, and but another argument for early diagnosis and prompt operation.

PÆDIATRICS.

FŒTAL ENDOCARDITIS.

D. Porak (*Journal de Médecine de Paris*, No. 23) reports the case of a child, which became deeply jaundiced three days after birth. The next day it was, at intervals, very cyanotic; nothing abnormal heard over the heart. The fifth day there was decided embarrassment of respiration. Disseminated areas of dullness over both lungs, with moist rales. The child died the next day.

The autopsy showed large areas of red hepatization, the lung being non-crepitant and sinking in water. The right side of the heart showed a large and patent foramen ovale. The left auricle and ventricle are small, the ventricle especially contracted: its wall is of a yellowish-white color, and covered as if with tendinous cords, adherent to the wall. The mitral valve is represented by two or three small bulbar projections. The aortic valve has disappeared, its place being taken by a rigid, perforated membranous septum, with irregular thickening. The aortic orifice, as also the lumen of the aorta, is much smaller in diameter than usual. The wall of the ventricle is thickened.

Fœtal endocarditis is not as rare as one would suppose. Haranger reports three varieties: (1) With complete obliteration of the aortic orifice; (2) with disease, but not occlusion, of the aortic valve; (3) with isolated changes at the mitral. Collateral circulation is maintained either by the foramen ovale, ductus arteriosus, or by incomplete union of the ventricular septum.—*Cin. Lancet and Clinic.*

CROUPOUS PNEUMONIA TREATED BY DIGITALIS.

After several years' trial of the various methods of treatment which have been recommended for croupous pneumonia, Prof. Petresco (*Therap. Monat.*) has arrived at the conclusion that large doses of digitalis give the best results.

He administers in the course of 24 hours an infusion made from 4 to 8 g. of digitalis leaves. This daily quantity he continues during two to four days, according to the severity of the illness. In no instance were vomiting or other toxic effects occasioned by the medicine.

The temperature, as a rule, falls from one to three degrees after a single dose, and from five to six degrees after two or three doses. At the same time the pulse is reduced by from 40 to 60. This effect on the temperature and pulse continues for about ten or twelve days, during which time the lung, as a rule, returns to its normal condition.—*Cent. f. g. Therap.*

HYGIENE.

THE PARASITE OF QUARTAN AGUE.

In the *Zeitschrift für Hygiene*, vol. x, p. 137, appears the first of a series of papers by Camillo Golgi, demonstrating by means of photography the development of the parasite found in malarious fevers. This paper deals with the amœba malariæ febris quartanæ, the form found in the quartan type. In 1880 Laveran stated that these parasites are present in every case of malaria, and in no other condition, and that they are probably the cause of the disease. His observations have been confirmed by pathologists in all parts of the world, and at the present time the weight of proof seems to be in favor of his contention. In the above paper Golgi claims to have been the first to demonstrate that the different forms described as occurring in the blood are simply modifications of one form, and, further, that these metamorphoses follow each other according to a fixed law. This development takes place within, and leads to the destruction of the red blood corpuscles. At first the amœba-like parasite is small and non-pigmented; it increases in size at the expense of the substance of the blood corpuscles, becomes pigmented, and, after passing through a series of metamorphoses, finally ends in a process of segmentation. This process of segmentation takes place at the same time as, or short time before, the onset of the febrile paroxysm, and has for its object the formation of a new generation of the parasites. The pigment granules stored up in the body of the parasite take no part in this process of segmentation, and hence, on its completion, escape into the blood plasma, where they are seized upon by the white blood corpuscles and cells of the liver, spleen, etc. The new brood of parasites at once pass into fresh red blood corpuscles, and so commences anew the cycle of metamorphoses leading up to the next paroxysm of fever. The period of time which elapses between the entrance of the parasites into the red blood corpuscles and their segmentation is exactly three days, and hence arises the periodicity of the quartan type of malarial fever. During the first and second days the parasite passes through the various phases of its development within the blood corpuscles, on the third day segmentation takes place, the new brood is set free, and fever results; in other words, the period of apyrexia corresponds with the endoglobular growth of the parasite.

Golgi states that a knowledge of these developmental stages is of immense practical importance for the purpose of diagnosis, by which an almost mathematical degree of accuracy can be arrived at, and that it is no exaggeration to say that by the simple mi-

croscopic examination of a few preparations of blood the physician is in a position to tell when the last attack of fever occurred, to foretell the time of the next attack, and further to recognize what type of malarial fever he is dealing with. The simple quartan fever is explained by Golgi as resulting from the development in the blood of one set of the parasites, which ripen every three days, while the double and triple quartan fevers are caused by the development of two and three sets respectively; coming to maturity on consecutive days. This hypothesis, of course, cannot apply to the tertian type of of malarious fever, since in this the febrile paroxysms follow each other with an interval of only one day of apyrexia intervening, instead of two days as in the case of the quartan type. Golgi is of the opinion that he has brought forward satisfactory evidence to show that tertian ague depends on the presence in the blood of a distinct variety of the malaria parasite, which passes through its developmental phases in two days instead of in three. In regard to classification, Golgi holds that the various clinical types of intermittent fever are caused by varieties of one and the same parasitic species, and that this belongs to the genius amœba. The twelve photographs which illustrate his first paper deal with the development of the parasite of quartan fever, and show, surrounded by normal red blood corpuscles, its successive metamorphoses. The photographs, which are very fine, were taken by means of Zeiss's microphotographic apparatus.—*Brit. Med. Jour.*

MEDICAL CHEMISTRY.

THE MERCURIC TEST FOR MYDRIATIC BASES.

In the *Pharmaceutical Journal* of March 8, 1884, A. W. Gerrard described a group test distinguishing atropine, hyoscyamina, daturine, and homatropine from other alkaloids. The test pointed out that the above pure bases, when gently warmed with a 5 per cent. solution of mercuric chloride in spirit and water, gave a red precipitate of mercuric oxide. Since its publication the test has been confirmed by Professor Flückiger, Dr. Schweissinger, and others. With the publication of the recent "Additions" to the British Pharmacopœia the test has appeared officially in that work in connection with hydrobromate of homatropine. The official test differs from Gerrard's by the use of a 2 per cent. solution of mercuric chloride instead of a 5 per cent. solution a difference of little moment. Quite recently the test has been criticised by P. W. and A. H. Squire in their "Supplement to the Companion to the B. P.," especially as regards hyoscyamine. These authors remark that treated in the same way as hydrobromate of homatropine, "hyoscyamine salts give the yellow precipitate which, however, does not turn red." Having but little doubt of the correctness of my former work, it was yet thought desirable to repeat my experiments. This has been done, and the results are fully confirmatory of former statements.

As the method of applying the test requires care it is as well to repeat it here. Place about $\frac{1}{10}$ grain of pure hyoscyamine, extracted from a salt by ammonia and chloroform, upon a watch glass or in a test tube, carefully add 20 minims of 2 per cent. solution of mercuric chloride in proof spirit, watching the change. At first the hyoscyamine becomes pale yellow, then darkens a little, finally heating a well marked red precipitate is formed. How the Messrs. Squire failed to obtain a like result it is difficult to understand, but either the testing or the hyoscyamine must have been at fault.

As regards hyoscine, Messrs. Squire state that it yields no mercuric oxide under the above test. This Mr. Gerrard has confirmed, so it is a character which enables us easily to distinguish hyoscine from other mydriatic bases.—*Ph. Jr. Trs.*

SIMPLE METHOD OF DIFFERENTING BUTTER AND OLEOMARGARIN.

A. R. T., St. Louis.—Please give (if there is any) a simple and ready method of telling artificial butter, hog butter, somebody has called it—from the genuine article.

As stated in a recent number of this journal, probably the easiest test, of any reliability at least, is the alcoholic solution of silver nitrate. Dissolve 25 parts of the silver nitrate in 100 parts of alcohol of 95°. Put some of this solution in a test-tube, and melt and add a portion of the material to be tested. Agitate for a few moments, and let stand. Pure butter retains its natural color, while the margarine will become a dirty brick red, the color of a mixed sample depending upon the quantity of the adulterant present therein. The test is said to be sufficiently delicate to detect 5 per cent. of margarin, while with 10 per cent. the color reaction is very strong.

Bodairy has devised a process by which the percentage of oleomargarin in adulterated

butter may be rapidly determined with an approach to exactness. It is as follows: Into a graduated test-tube of large size pour 15 ccm. of toluol. To this add 15 ccm. of the butter to be analyzed, after having melted and strained it, pour on top of the butter 50 ccm. of alcohol of 97°, shake, and place the whole in a water-bath heated 50° C. The liquid remains clear, or nearly so, if the butter be pure, while if margarin be present it first becomes turbid, and later separates into two layers, of which the upper contains the margarin. The following gives the approximate percentages of margarin ascertained by the volume of the layer:

11 ccm. of layer	10 per cent. margarin.
14 ccm. of layer	20 per cent. margarin.
19 ccm. of layer	50 per cent. margarin.
29 ccm. of layer	75 per cent. margarin.

—*Nat. Drug.*

NEWS AND MISCELLANY.

JOURNAL OF COMPARATIVE NEUROLOGY.

This Journal is a quarterly, of about 100 pages, and edited by Dr. C. L. Herick.

THE MEDICAL SOCIETY OF FRANKLIN COUNTY, PA.

The Medical Society of Franklin county, will hold its annual session July 21st, at Chambersburg. Dr. John Montgomery will deliver the address of welcome, and papers will be read by Dr. D. F. Unger, Dr. Geo. F. Hall, and Dr. I. F. Snively.

VIS MEDICATRIX.

This is the title of a new bi-monthly Journal of Medicine, human and comparative, under the editorship of Woods Hutchinson, A. M., M. D., who has as associates L. H. Pammel, B. Agr., and S. Stewart, M. D., D. V. M. The Journal is the organ of the Iowa State Medical Society.

NEW APPOINTMENTS AT THE PHILADELPHIA POLYCLINIC.

Dr. A. R. Wharton has been elected Lecturer on Surgical Diseases of Children. Dr. Chas. P. Noble has been elected Lecturer on Gynecology; Dr. Jas. K. Young, Lecturer on Orthopædic Surgery; Dr. G. Betton Massey, Lecturer on Gynæcological Electrotherapeutics, and Dr. Lewis H. Adler, Lecturer on Diseases of the Rectum.

OHIO STATE MEDICAL SOCIETY.

The Ohio State Medical Society held its 42nd annual session at Sandusky, June 18, 19 and 20, 1891. Dr. W. J. Conklin, of Dayton presided, and Dr. G. A. Collamore, of Toledo was Secretary. More physicians were present than attended the meeting last year.

The officers for the next year are: President, Dr. G. A. Collamore, Toledo; First Vice-President, Dr. X. C. Scott, Cleveland; Second Vice-President, Dr. A. G. Gaume, Sandusky; Third Vice-President, Dr. A. R. Baker, Cleveland; Fourth Vice-President, Dr. F. D. Bain, Kenton; Secretary, Dr. T. Fitzpatrick, Cincinnati; Assistant Secretary, August Rhu, Marion; Treasurer and Librarian, Dr. T. W. Jones, Columbus. The following members of Committees were appointed for five years: Finance, H. J. Herrick, Cleveland; Legislation, D. J. Snyder, Columbus; Ethics, S. S. Thorn, Toledo; Publication, E. S. McKee, Cincinnati; Admissions, H. F. Hose, Cleveland.

Cincinnati was selected as the place of the next meeting to be held in May, 1892.

The members were entertained by an excursion to Cedar Point where the President's address was delivered and a concert given, followed by a banquet. An excursion to Put-In-Bay, Kelley's Island, Lakeside and Middle Bass was enjoyed on Friday afternoon and evening after the close of the meeting. The President's address was on Moliere and the Doctors, and consisted principally of historical material concerning Moliere and his numerous sayings concerning the medical profession.

The Committee appointed to secure the passage of a law for the protection of physicians, reported that not liking the complexion of the present Legislature, they had not essayed anything.

The subject of Contract Railroad Surgeons, referred from the American Medical Association, was brought up and referred to a committee of five. The resolution making the members of auxiliary societies, that is county and district medical societies, members of the State Medical Society, was passed after some discussion. Indiana and other States have greatly improved their membership in this way. The business of the society is to be done by delegates and all who are now members will not be affected by this change, i. e. deprived of their right of suffrage.